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No. 3099.—VOL. LXV.

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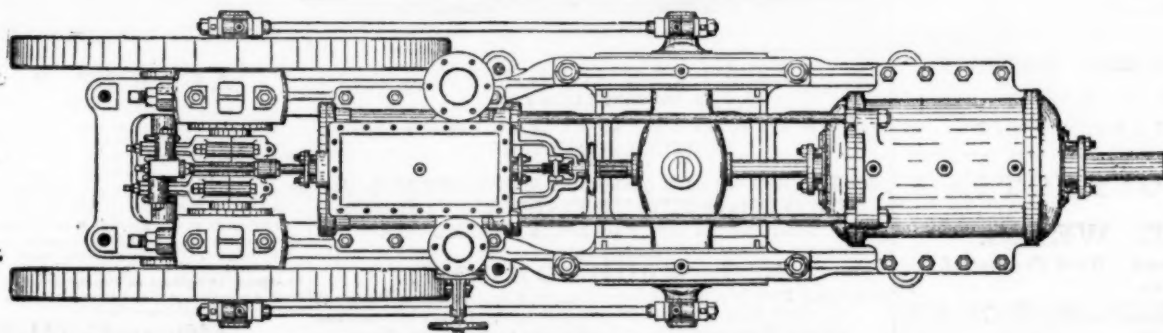


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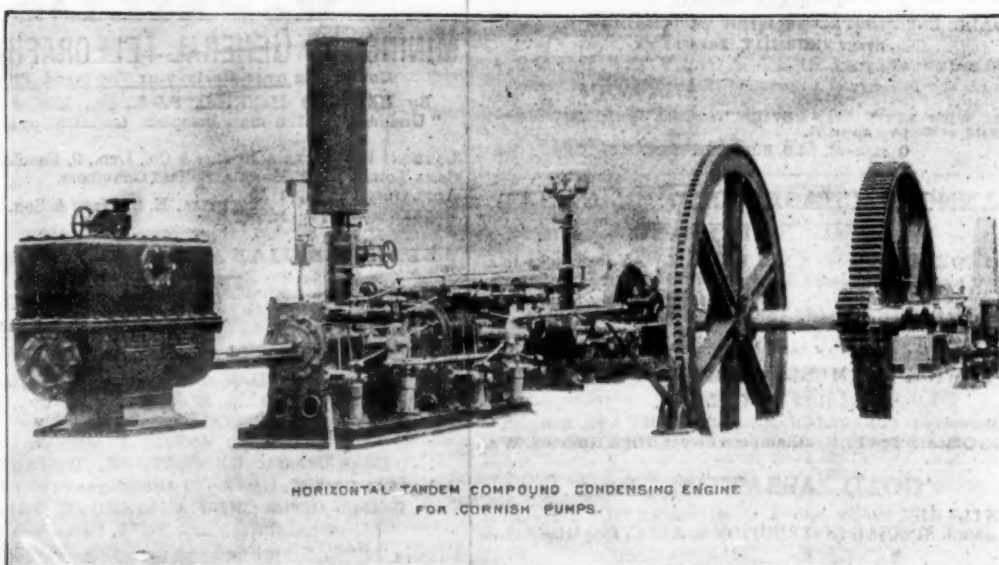
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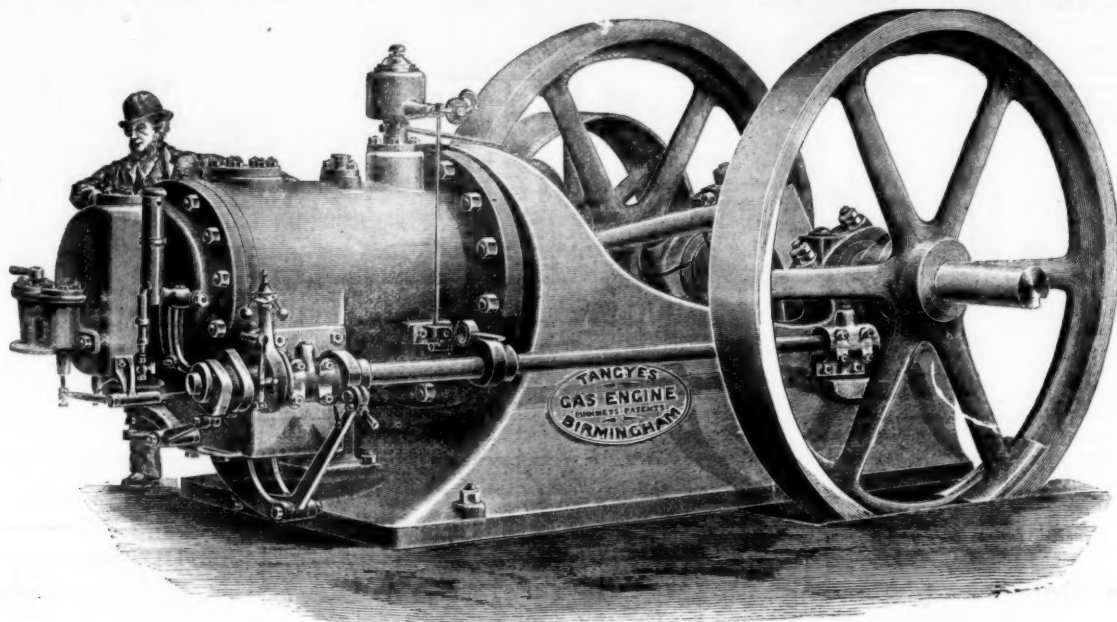
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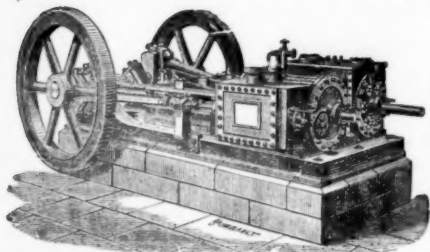
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## AIR COMPRESSORS

With Compound Air and Steam Cylinders,

Fitted with SCHRAM'S Inlet and Outlet Valves giving the greatest efficiency.



### SCHRAM'S IMPROVED Rock Boring Machines.

Supplied to the Indian, Colonial, and other Governments.  
 2500 IN USE in all PARTS of the WORLD.

### DIAMOND PROSPECTING DRILLS.

### "OPTIMUS" COMPOUND ROCK DRILL.

(P. J. OGLE'S PATENT.)

Consumes 40 per cent. less Compressed Air than any other Drill at the same time giving the most effectual results.

ESTIMATES AND FULL PARTICULARS ON APPLICATION.

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Telegrams—Green, Foundry, Aberystwyth.

SILVER MEDALS AWARDED AT THE ROYAL CORNWALL POLYTECHNIC, 1872 & 1876; GOLD MEDAL AWARDED AT THE GREAT INTERNATIONAL MINING EXHIBITION, CRYSTAL PALACE, 1890.

ONLY AWARDS GIVEN FOR CONCENTRATION PLANTS

### GEORGE GREEN'S PATENT Self-Acting or Automatic Ore Dressing Machinery,

A Special Plant, on a reduced scale, has been erected at the Works by which samples of METALLIC ORES—up to Five Tons may be treated, and the commercial value determined, in this way the most suitable arrangement of Plant is ascertained, a considerable advantage to intending Purchasers of Crushing and Concentrating Plant.

GOLD STAMP AND OTHER MILLS.

**GEORGE GREEN,**  
 THE FOUNDRY, ABERYSTWYTH.

## For PURE ALUMINIUM

98 to 99½ per cent. (98 per cent. minimum guaranteed) in

### INGOTS, STICKS, & ROLLING SLABS;

ALSO FOR

SHEETS, &c., AND  
 FERRO-ALUMINIUM.

# ALUMINIUM.

ALSO TO

**HENRY R. MERTON & CO.,**

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**LONDON, E.C.**

## A. & J. STEWART and CLYDESDALE, Limited.

**Glasgow, Coatbridge, and Mossend.**

WROUGHT IRON WELDED TUBES and FITTINGS for GAS, WATER, and STEAM.

Light Lap-welded Wrought-iron and Steel Tubes

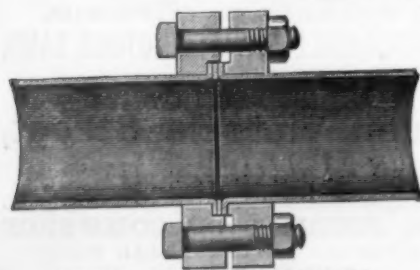
(SPECIALLY ADAPTED FOR MINES).

With Patent Flanged Joints (as illustrated) for the Conveyance of Water, Steam, and Air, at High and Low Pressures.

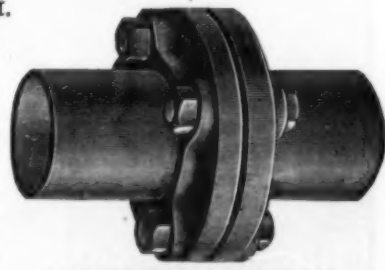
LAP-WELDED IRON AND STEEL BOILER TUBES

FOR LOCOMOTIVE, MARINE, AND OTHER MULTITUBULAR BOILERS.

**STEEL & IRON PLATES FOR BOILERS, BRIDGES, &c.**



SECTION OF PATENT FLANGED JOINT



PLAN OF PATENT FLANGED JOINT.

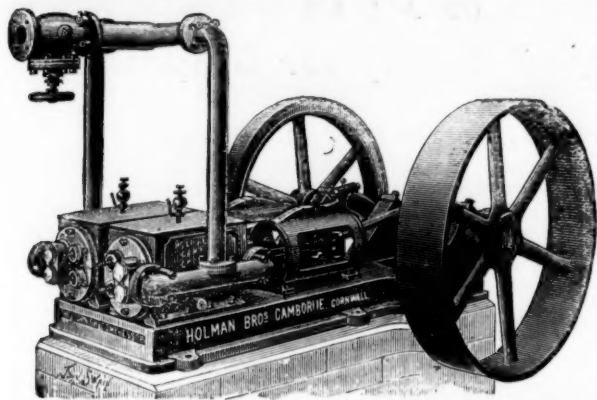
Head Offices: **41, OSWALD STREET, GLASGOW.**



# HOLMAN Bros., Camborne, Cornwall.

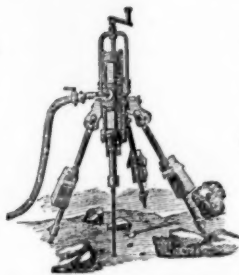
ESTABLISHED 1839

Patentees and Sole Makers of  
"THE CORNISH" ROCK DRILL and "THE CORNISH" COMPRESSOR



FIRST  
SILVER MEDAL,  
Highest Award,  
Mining Institute  
Contest, 1881.

Three Makers  
represented.



FIRST  
SILVER MEDAL  
Highest Award,  
Royal Cornwall  
Polytechnic  
Jubilee Exhibition  
Contest, 1882.

Five Makers  
represented.

AWARDED SILVER MEDAL INTERNATIONAL  
INVENTIONS EXHIBITION, 1885.

## RECORD OF WORK DONE

At Botallack Mine, St. Just, Cornwall, **TWELVE MEN** with **TWO** new Patent **CORNISH ROCK DRILLS** drove, sunk, and rose **288 FATHOMS** in **12 MONTHS**, equal to five times the Speed of Hand Labour.

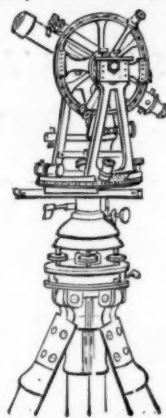
At Wheal Grenville Mine, Camborne, Cornwall, **SIX MEN** with **TWO** new Patent **CORNISH ROCK DRILLS** started from the **150 FATHOMS** level and put up in **EIGHT MONTHS** a **11 FEET** by **5 FEET PERPENDICULAR RISE** **46 FATHOMS 5 FEET 6 INCHES**, and about midway drove **1 FATHOM 5 FT.** No communication of any kind was effected until holing to the Shaft brought down from surface.

Estimates for **ROCK BORING PLANT** and **GENERAL MINING MACHINERY** on Application.

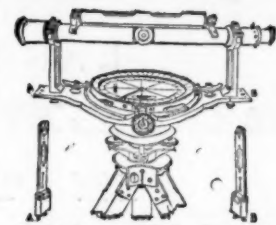
London Offices: 7 and 9, LEADENHALL BUILDINGS, E.C.

# JOHN DAVIS AND SON,

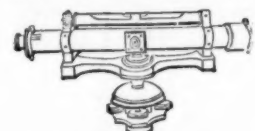
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118, NEWGATE STREET, LONDON.



Transit Theodolite with Patent  
Hoffman Tripod Head, and  
Trough Compass.



Davis's Improved Hedley Dial, with  
Telescope and Sights Interchangeable  
and Patent Hoffman Tripod Head.



Dumpy Level with  
Hoffman Patent Tripod Head.

## MINING, SURVEYING AND ENGINEERING INSTRUMENTS

THEODOLITES. LEVELS.

Davis's Improved Hedley Miners' Dials with **HOFFMAN PATENT TRIPOD HEAD**.  
AND ALL DESCRIPTIONS OF MATHEMATICAL AND  
MINING SURVEYING INSTRUMENTS.

Revised Illustrated Catalogues Free to any Part of the World.  
SECTION (A) MATHEMATICAL DEPARTMENT AND SAFETY LAMPS  
SECTION (B) ELECTRICAL DEPARTMENT.

Gold Medal Awarded Mining Exhibition, 1890.  
"THE ENGINEERING TELEGRAPH CODE USED."

HENDERSON'S RAPID TRAVERSE.

**AWARDS:** CRYSTAL PALACE, 1890; TASMANIA, 1891; KIMBERLEY, 1892.

# CONCENTRATION.

The Clarkson-Stanfield Concentrator (Limited).

In the **CLARKSON-STANFIELD** process of Concentrating Refractory and Complex Ores no water is required; dust is reduced to a minimum; the loss of Mineral through water-borne Slimes is obviated.

**OUTPUT  $\frac{1}{2}$  TO 2 TONS PER HOUR, ACCORDING TO SIZE OF MACHINE.**

CONCENTRATOR TO BE SEEN IN OPERATION AT THE COMPANY'S ONLY ADDRESS:

**6, COLONIAL AVENUE, MINORIES, LONDON, E.**

The Machine is superior to Sieves for Sizing Homogeneous Substances, such as Emery, Sand, and Powders, and may be used to great advantage in the preparation of Ochre.

N.B.—The owners of the Carnadochan Mine, near Bala, North Wales, will, by arrangement, show their **CLARKSON-STANFIELD** plant working on a Refractory Low Grade Gold Ore.

## CONTRACTS OPEN:

FOR MINE, QUARRY, RAILWAY, AND ENGINEERING WORK, STORES, &c.

"We shall be obliged by being promptly placed in possession of particulars regarding contracts open for competition, and of the results of successful tenders. In the latter case contract prices should be given."

The date given is that by which tenders must be delivered, in nearly all cases further information can be obtained on application at the addresses given. In applying for such the name of "The Mining Journal" should be mentioned as the original source of the information, concerning which further particulars are required.

### HOME CONTRACTS.

**Locomotives, January 15 (London, E.C.).**—For the supply of (1) 10 first class locomotives and tenders; (2) underframes, &c., for 203 covered goods wagons; (3) underframes, &c., for 50 third class carriages, and 10 brake vans, for the Bengal and North Western Railway Company (Limited). Forms of tender and conditions of contract may be obtained on payment of £1 ls. each, by application at the company's offices.

**Sinking shafts, January 15 (Brighouse).**—For sinking or boring about 50 shafts or holes within and near to the borough, for the Corporation, in the positions shown on the plan, and according to the specification, which can be seen at the office of Mr. A. M. Fowler, M.I.C.E., 1, St. Peter's-square, Manchester, where form of tender can be obtained.

**Reservoir, January 16 (Preston, near Linsithgow).**—For constructing a small reservoir and laying water pipes at Preston, near Linsithgow. The work to be done early in the spring. Plans to be seen with, and schedule of quantities obtained from, Mr. James S. rang, C.E., Falkirk, with whom tenders are to be lodged.

**Waterworks, January 17 (Ennis, Ennis, Ireland).**—For the construction of works at Ennis for the supply of water to the town, for the Guardians of Ennis Ennis Ennis, according to plan and specification to be seen at the office of Mr. D. Keohier, E.S.O., Ennis Ennis. Each tender to name two sufficient sureties who will be prepared to sign a bond for the proper carrying out of these works.

**Reservoir, January 19 (Keyworth).**—For the construction of a covered reservoir of a capacity of 50,000 gallons, and providing and laying about six miles of 4 inch and 3 inch cast-iron pipes, together with all necessary sluice valves, fire hydrants, and other apparatus required for supplying water to the parish of Keyworth, for the Guardians of Bardon Union. Drawings and specifications may be seen at the offices of Mr. George Hodson, M.I.C.E., F.G.S., Bank Chambers, Loughborough.

**Shaft Sinking, January 19 (Scorrier, Cornwall).**—Tenders will be received up to January 19th, for sinking Richards' shaft, Killfretth Mine, by two rock drills below the 80-fathom level (perpendicular), shaft 7 x 14. Further particulars to be obtained by applying or writing to the manager.

**Steel Colliery Wagons, January 25 (India Office, S.W.).**—The Secretary of State for India in Council is prepared to receive tenders to supply steel colliery wagons. The conditions of contract may be obtained on application to the Director-General of Stores, India Office, Whitehall, S.W.

**Coal, January 24 (Dublin).**—For supplying Whitehaven house coal to the several lighthouses on the Irish coast, for the Commissioners of Irish Lights. Forms of tender, with all particulars of the contract, can be had on application to Mr. Owen Armstrong, secretary, Irish Lights Office, Dublin.

**Railway Construction, January 25 (Barry Dock, near Cardiff).**—For the construction of a new railway, about one mile in length, across Barry Harbour, at the west end of Barry Dock, and of a breakwater, about 140 yards in length, at the entrance to Barry Harbour, for the Barry Railway Company. Drawings and specifications can be seen on and after January 7, at the offices of Mr. John Wolfe Barry, 21, De la Hay Street, Westminster.

A GENERAL meeting of the members of the North of England Institute of Mining and Mechanical Engineers will be held in the Wood Memorial Hall, Newcastle-upon-Tyne, on Saturday, the 19th inst.

## NEW PATENTS.

LIST OF APPLICATIONS for New Patents relating to Mining Metallurgical, Engineering, Railway and kindred matters, specially compiled from official sources for the "Mining Journal" by Messrs Rayner and Company, Patent Agents, 37, Chancery Lane, London, W.C., who will forward all information regarding them free on application.

- 25024 Horace Broughton Nash, 23, Victoria Road, Burnley.—An improved wedge employed as a tool in the getting of coal or other minerals.—December 24.
- 25092 Thomas Lees and William Douglas, 154, St. Vincent Street, Glasgow.—Improvements in machine for crushing ores.—December 24.
- 25107 Thomas Bell, 56, Buchanan Street, Glasgow.—Improvements in steam generators.—December 27.
- 25157 The Right Honourable Samuel Baron Masham, 21, Southampton Buildings, Chancery Lane, London.—Improved apparatus for preventing over-winding in mines.—December 27.
- 25203 Ernest Gearing, 46, Lincoln's Inn Fields, London.—Improvements in gas generators.—December 28.
- 25211 Henry Harris Lake, 45, Southampton Buildings, Chancery Lane, London.—Improvements in and relating to rotary engines or motors.—December 28.
- 25221 Llewelyn Birchall Atkinson, 1, Queen Victoria Street, London.—Improvements in dynamo-electric generators and motors.—December 28.
- 25227 Hugh William Waddell, 47, Lincoln's Inn Fields, London.—Improvements in fans for ventilating mines or tunnels, or for other analogous purposes.—December 28.
- 25241 James Pollard Lea, 7A, Northgate Street, Bath.—Improvements in gas and oil motor engines.—December 29.
- 25284 Urban Bleier and Joseph Morath, 2, Quality Court, Chancery Lane, London.—Improvements in the construction of steam boiler and other furnaces.—December 29.
- 25288 Pierre Grandjean, 4, South Street, Finsbury, London.—Improvements in miners' safety lamps.—December 30.
- 25290 Albert Edward Jones, 45, Southampton Buildings, Chancery Lane, London.—Improvements in steam generators.—December 30.
- 25298 Anthony Ephraim Narlian, Lipari, Italy.—Improvements in steam generators.—December 31.
- 25372 Frederick Henry Cheesewright, 166, Fleet Street, London.—Improvements in or connected with steam generators.—December 31.

### SPECIFICATIONS PUBLISHED.

23492, Zohrab, hardening or converting into steel the surfaces of iron plates, 1893; 24923 Sulman, treating gold ores, 1893; 2065, Thomson and others, gas and oil engines, 1894; 2343, Fox, pressing metals, 1894; 2656, Bellamy, gas, &c., 1894; 4439, Bond and Pickerill, furnaces, 1894; 18758, Golfer, furnaces or stoves, 1894; 21130, Thompson, metallic packages, 1894; 21228, Thompson, muffle furnaces, 1894; 21461, Roldon, electric motors, 1894.

The above specifications published may be had of Messrs. Rayner and Co., 37 Chancery Lane, London, at 10d. each, including postage.

**CLEVELAND IRON TRADE: THE YEAR'S PRODUCTIONS.**—The return of stocks giving the year's production was issued by the Cleveland ironmasters on Thursday. There has been much the largest production of iron on record, being of hematite, basic, and steel making iron 1,341,556 tons; of Cleveland iron 1,422,863 tons; giving a total of 2,764,419 tons. This is the first time in the history of the trade when Cleveland iron has had to take second place in point of production compared with hematite. Stocks have increased in Cleveland iron upon the year by 68,000 tons, nearly all in makers' hands. The stock on December 31 was 230,000 tons. There was a heavy increase for December in stocks, the addition being 30,000 tons. There were 10 more furnaces in blast than at the end of the previous year, 44 being on hematite, &c., and 50 on Cleveland iron. The large increase of stocks for last month is chiefly due to the smaller shipments of pig-iron.

## ANSWERS TO CORRESPONDENTS.

Correspondents will please take note that all communications will in future be answered in this column and not through the medium of the post. All questions and replies should be accompanied by the name and address of the writer.

### REPLIES.

- PENLLYNE.—We have written to you privately.
- H. D.—You had better leave them alone.
- M. S.—In all likelihood the shares will have a rise.
- G. M.—There is no market for these shares. We do not say there never will be.
- WEST AUSTRALIAN.—We do not think there is the slightest cause to get despondent.
- W. W.—We regard these shares as a good investment.
- F. G.—The company is about to reconstruct.
- MONA.—All is not gold that glitters. Avoid them.
- GEORGE.—You had better hold until you can sell at a small profit.
- C. W. H.—Hold all for better prices. We cannot estimate how far the advance will go.
- E. J. T.—We cannot explain why no official communication has been made on the subject.
- N. R. S.—All the shares you name are fair spec.
- J. S. A.—We cannot recommend these shares.
- M. D. C.—It is not announced when the settlement to which you refer will take place.
- A. M.—The course you propose is a sound one.

**THE PRODUCTION OF PIG IRON.**—The total production of Cleveland pig iron in the Cleveland district during the past year was 1,422,863 tons, whilst of hematite, basic, &c., the total amount produced was 1,340,556 tons. In Scotland, 655,614 tons of pig iron were produced during the same period.

**THE KEMPINKOTE GOLD FIELD (LIMITED).**—An extraordinary general meeting of the shareholders of the Kempinkote Gold Field (Limited) was held at the offices, No. 6, Queen-street-place, on Tuesday, for the purpose of considering and, if thought fit, confirming the resolution passed at the extraordinary general meeting, held on the 18th of December last.—Mr. H. H. Long presided, and moved the confirmation of the resolution, which was seconded by Mr. S. Grady, and carried unanimously.

The twenty-second annual dinner of the Old Students of the Royal School of Mines will be held at the Criterion Restaurant, on Friday, the 25th inst., at seven o'clock. The chair will be taken by W. H. Greenwood, Esq., Assoc.R.S.M., M.Inst.C.E.



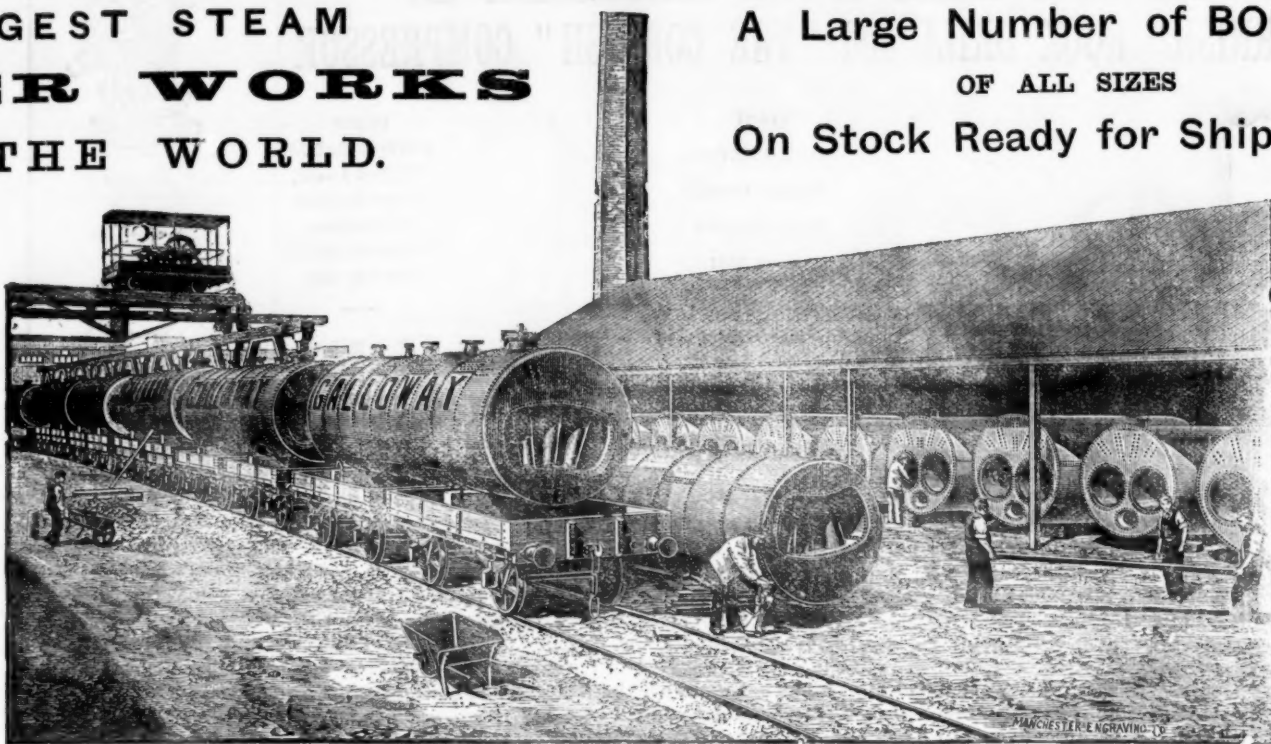
# GALLOWAYS, LIMITED, MANCHESTER.

LARGEST STEAM  
**BOILER WORKS**  
IN THE WORLD.

A Large Number of **BOILERS**  
OF ALL SIZES  
On Stock Ready for Shipment.

GRAND PRIX  
PARIS, 1878 & 1889

GOLD MEDALS  
AT ALL RECENT  
EXHIBITIONS.

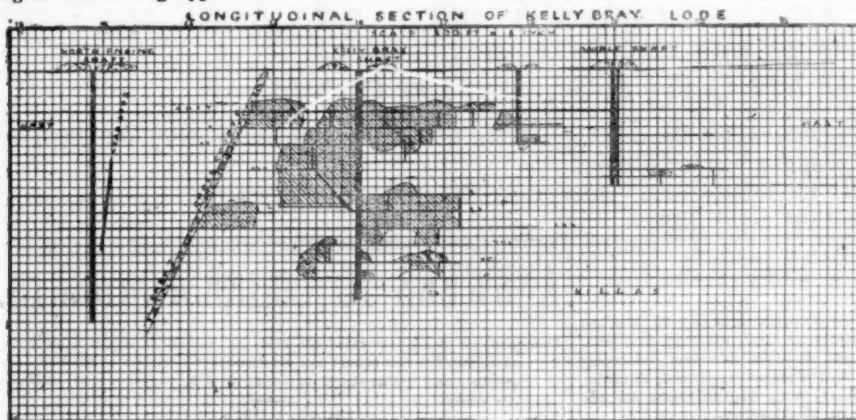


## HISTORY OF THE HOLMBUSH, REDMOOR, AND KELLY BRAY MINES.

SITUATED NEAR CALLINGTON, EAST  
CORNWALL.

By W. F. WILKINSON, F.G.S., Assoc. M.Inst. C.E.  
(Continued from page 1440.)

IN 1872, Redmoor Mine alone was being worked, and that only in the shallow levels. Captain Gifford, one of the agents of a neighbouring mine, the Prince of Wales, was appointed manager. The workings appear to have been for tin on the Kelly Bray



lode west of the great crosscourse, and on a "new" lode running parallel with Kelly Bray in the northern part of the sett. Encouraging results were met with, but the operations were on far too small a scale to be remunerative to the shareholders. This part of the property has been so little explored up to the present day, that the following report of the operations in 1872 is worth recording:—

Redmoor: T. Goldsworthy, September 5th, 1872. I have this day inspected the above-named mine, and beg to hand you the following as my report:—This property is situated to the west of Kit Hill, and about  $\frac{1}{2}$  mile from the granite in a light clay slate. The sett is an extensive one, and contains several east and west lodes. Five lodes have been worked on by the ancients, and no doubt but what the ancient workers found the backs contained tin. Some 30 years ago the north and south lode was wrought extensively for silver-lead ore; I worked on the lode for over two years, and large returns were made. The portion of the property now being worked on is known as the South Tin and Main lodes. In the adit there is a caunter lode, which appears to be gone across the main lode. The caunter lode is bearing about  $10^{\circ}$  to  $12^{\circ}$  south of west and north of east. The following will show you the present operations:—South tin lode: a pair of men (four) are working on tribute, and are down about 7 fathoms from surface, and about 3 fathoms in length, the lode varying in size from 1 to  $1\frac{1}{2}$  and 2 feet wide, in places producing fair quality tin-stone, working at 12s. in the £, at £70 per ton to the tributer. There is a long run of old workings; and, judging from the same, when the adit crosscut is put out to this lode a long run of tribute ground will be opened up. A crosscut has been extended to within a short distance of the lode, but is suspended, owing to poor ventilation, which will soon be overcome when the engine shaft is communicated to the adit level, which will, by present appearances, occupy eight weeks. The engine shaft is in course of sinking by a full pair of men on the course of the lode, and is down about 14 fathoms; the lode in the bottom of the shaft is from 24 to 3 feet wide, composed of gossan, quartz, enpel, mundio, and, from a sample, produces a little tin, but not at present in paying quantities—a kindly lode. I would remark that I am of opinion this will prove a copper lode. This lode and Kelly Bray lode will form a junction from their underlies about 80 fathoms below the surface. Kelly Bray lode is a strong lode to the east of the Holmbush crosscourse; and yielded large quantities of copper ore. Nothing has been done on the Kelly Bray lode west of the Lead lode. The adit level is 25 fathoms below the surface on the underlie of the Main lode; the ground is taken away for about 70 fathoms in length for tin, and worked below the adit as deep as the water would allow by manual labour, and the backs in places worked nearly to surface; this shows the lode

to have been productive for a great length. To the west of the tin ground the drive appears to be continued for the last 30 fathom on the Caunter lode. The Main lode, or the tin-bearing part, is, no doubt, standing to the north, which has been pretty well tested, as there are 7 fathoms from the drive in the adit to come under the engine shaft. The Caunter lode, so far as explored, is a masterly lode, and exceedingly promising, containing rich black oxide and grey sulphurets of copper, and will pay for working in places. (Vol. XLII, p. 891).

A meeting of the company was held on February 13, 1873, and the accounts showed a balance against the adventurers of £334 6s. 9d. Captain Gifford attended the meeting, and spoke in strong terms of the prospects of the mine. Some of the weekly reports acknowledge that the dialling or surveying, was incorrect, and that the workings in this complicated piece of ground, where there were three lodes, were being carried on under difficulties. (Vol. XLIII, et seq.)

From 1872 to 1876 there are no reports at all from Holmbush or Kelly Bray Mines, which were probably shut down.

In a report from Cornwall, in 1875, it is stated that arsenic lodes were being looked after, and special attention was given to the mining properties of East Cornwall. Some light is thrown on the methods employed for selling the ores, which appear to have been more in the interest of the buyer than the seller. The ores appear to have been sold by weight rather than by assay, both buyers and sellers trusting to their own judgment; and it was suggested that the mines suffered on account of the buyers combining and arranging prices amongst themselves. The mines, therefore, thought

that the time had come when it would be advisable for them to erect their own refining works, so as to be able to produce the white arsenic themselves, and save the refiners' profits. The erection of refining furnaces and chambers was never carried out at the Callington mines, but arrangements were made at a later date to refine the ores from these mines, at works belonging to the mines at Greenhill.

The history of the mine would not be complete without referring to the experiments that were carried out both at Redmoor and Greenhill by Dr. Stephen Emmens for extracting the silver and copper in the ore after the arsenic had been burnt out. The process proposed was called the Nascent Process, and consisted in roasting the ore with 10 per cent. of salt to chloridise the silver and copper, and in leaching out the salts of these metals with hot brine. The precipitation was effected by iron. Dr. Stephen Emmens estimated that the burnt ore contained on an average  $1\frac{1}{2}$  per cent. copper and 4 ounces of silver per ton, which had at that time an intrinsic value of 30s. per ton. He estimated the cost of treatment at 16s. per ton (vol. XLV, p. 1012), and an estimate made later put the cost as low as 12s. per ton (p. 1080). A prospectus of the Nascent Copper Process Company, with a capital of £15,000, is given on p. 1136.

The proposals were severely criticised in *The Mining Journal* at the time. The operations of the company do not appear to have met with much success.

In 1876 a new company started to work Holmbush Mine with a nominal capital of £80,000, in £1 shares (vol. XLVII, p. 25), and in 1877 we find that the water was drained to the 60 fathom level, much mundie being taken out of the upper levels. The tribute miners were paid 6d. per unit for white arsenic per ton. A sample of a large parcel of ore, weighing 500 tons, was assayed by Messrs. Johnson and Matthey, with the following results, showing that the ores of this mine contain other valuable minerals besides arsenic:—

Refined arsenic ( $As_2O_3$ )	8 cwt.	=	40.00 per cent.
Black tin	68 lbs.	=	2.85 "
Copper	4 lbs.	=	0.2 "
Iron	5½ cwt.	=	27.5 "
Nickel	1½ lbs.	=	0.07 "
Sulphur	3 cwt.	=	15.0 "
Silica, &c. (P)	—	=	14.38 "

100.00 per cent.

with  $1\frac{1}{4}$  ounce silver, and  $12\frac{1}{2}$  grains gold per ton.

the intrinsic value of this ore at that time was calculated at £7 per ton, and the cost of mining was estimated at £1, so that the metallurgist who could extract all these minerals had a good margin to work upon.

(To be continued.)

## MECHANICAL ENGINEERING: MACHINERY, MINING and RAILWAY PLANT, &c.

Illustrated Descriptions of New and Standard Mechanical Appliances, Accessories and Processes, adapted to Mining, Metallurgical, Railway, Engineering and other Industrial Purposes.

### A WATER-TIGHT ELECTRIC BELL.

The accompanying illustration shows a new form of electric bell recently invented by Mr. F. C. Allsop. It has been designed for use in mines, railway stations, on board ship, and all other places where bells are exposed to damp and the direct action of the weather. The chief feature of the invention is that the magnet coils, contact breaker, and all other parts liable to be affected by moisture are hermetically sealed in a metal box, so that the bell may be fixed out of doors in all weathers. In fact, the bell will work under water, and may be left submerged for months together, without in any way affecting its working.

The illustration is from a 6-inch bell. Both the base and the box are of metal, and cast in one piece, the box being fitted with a metal lid, and a layer of indiarubber being used to make it water-tight. Inside the box are the magnets, the poles of which pass through one side, while outside the box and opposite these poles are the usual armature and hammer, working on the gong below. Inside the box polar extensions are fitted to the magnets, and off these extensions is worked a second armature, fitted with a contact breaker. Thus the armature inside the box makes and breaks the circuit, causing the one outside to vibrate in unison with it. Contrary to what might, perhaps, have been expected, the bell gives a very powerful stroke, and does not require any more battery power than the ordinary form. The bells are being manufactured by Messrs. F. C. Allsop and Co., manufacturing electricians, 165, Queen Victoria-street, E.C.

### A NEW COAL WASHER.

The Hardy Patent Pick Company have recently introduced a new coal washing machine, the particulars of which are as follows:—It has been designed on the lines of the old trough washer, and is constructed with a wrought iron or steel trough about 18 inches wide, having sloping sides, being widest apart at the top and narrowest at the bottom. At each end of this trough a sprocket wheel is fixed, on which a chain rides, and attached to the chain at suitable distances are scrapers at right angles to it, and which correspond with the inside shape of the trough. The scrapers form movable stops or dams, which are slowly moved by the chain along the trough in the opposite direction to the way the water runs. The trough is fixed at a suitable inclination, and the coal is admitted at the centre of its length and the water at its highest end or thereabouts, and as it runs to the lowest end it carries with it the coal, which is lighter than the dirt, and the dirt settles in the scrapers and is conveyed by them against the stream of water and delivered at the opposite end to that at which the coal escapes. The speed of the scrapers and quantity of water is regulated to suit the material washed.

CAPE GOLD EXPORT.—The *Dunottar Castle*, which sailed on the 9th inst. from Cape Town, took gold to the value of £42,000.



## WEST AUSTRALIAN LETTER.

(FROM OUR SPECIAL CORRESPONDENT.)

Bayley's still in a bad way.—A sensation from Pilbarra.—Murchison doing well.—Edjudina (beyond Kurnalpi) general favourite.

PERTH, NOVEMBER 30.

THE news from the gold fields may still be considered good, although our old favourite, Bayley, does not seem to mend in his condition, and there is no getting away from the fact that that famous mine is still looked upon as a sort of gauge of the permanency of Westralian mining. To the ordinary proprietors of a mine a good solid 3 or 4 ounce return per ton would mean prosperity. To the highly-strung nerves of the holders of Bayley's Reward, however, such a result is in the lowest degree dispiriting. The company is so weighted with capital, and the shareholders have been so spoiled with the 10-ounce per ton business, and the persistency with which 700 ounces per week have been turned out, that—at all events, here in Perth—the head is being very ominously shaken as intelligence keeps coming to hand of further fallings off in the grade of Bayley's ore. The cautious men here, who are not given to running wild when the latest wires of sensational finds arrive, seem to be of opinion that it will not be to the "show" mines that the colony will ultimately be indebted for its proud position as leader of the auriferous countries of the world. "These phenomenal finds," they say, "will have their day"—and they point meaningfully to the last return from Bayley's—"and steadily decline from chunks to specks, but it will be the enormous reefs with their ounce to three-ounce capabilities, which will, by proving themselves practically inexhaustible, carry us to prosperity and maintain us there."

Just now the centre of interest seems shifting from Coolgardie—with its daily announcement of the beginnings of new buildings, heavy transactions in the way of transfer of real estate, and comings upon wells of water, which, if they are all as overflowing as represented must endanger the town, which is, to say the least, scarcely prepared for an inundation—to the rising neighbourhood of Pilbarra. From there we learn that a gentleman, rejoicing in a name which would probably give a clue to his nationality to the dullest guesser—to wit, one Rory McPhee—has a few days ago taken out of his Reward Claim by dollying in the course of 12 hours over 300 ounces of the metal so beloved of men. Now there is something about a result like that which appeals very powerfully to the imaginations of most of us. Dollying, like driving a gig or writing a leading article, we feel instinctively we could do, as it were, "upon our heads," and only fancy the reward for doing it! A dozen hundred pounds sterling for the toil of one bright summer's day. No wonder that at Market Bar, and even so far away as Roebourne, the health of the lucky Rory is one of the most frequently drunk-to-day.

The Talga-Talga is the name given to the McPhee find, and it is currently reported that the claim is under offer to—if it is not actually secured by—a syndicate in Melbourne. The Augusta Mine—also in the Pilbarra district—was a few days ago formally handed over to the representatives of an English company, the money for it having been paid in full. The prospects of the property are thought to be very good. The latest crushing from the South-east Timbuctoo at Bamboo Creek gives a return of 4 ounces to the ton, and the Thistle and Princess May, in the same district, have respectively 2 ounces and 3 ounces to chronicle. The machinery which arrived some few weeks ago at the Mallina Mine is being rapidly got into place, and the manager is most sanguine as to the returns from the forthcoming crushings. The Mallina Brilliant has been sold to a London company. In the immediate neighbourhood of Roebourne, about 12 miles away from the town, several gold leases have been taken up, and there is much excitement in the place at reported finds. The usual course has been taken by the inhabitants in public meeting assembled—namely, to demand the immediate construction of a railway at the public expense. Sir John Forrest has not yet had an opportunity of replying to the resolution which has been duly forwarded to him. Some prospectors who brought between 200 and 300 ounces of good-looking alluvial "slugs" into Roebourne the other day have, it has been ascertained, been roaming about somewhere between the Shaw and the Turner "rivers." They refused to divulge the exact locality of their "happy hunting" ground, but a sharp watch is being kept upon their movements, in order that they shall not return alone. They were at the last advices evidently only in the town for the purpose of supplying themselves with provisions.

From the Murchison the most recent news is highly satisfactory. The latest returns of crushings show that only about half a dozen mines on the field give an average yield of less than an ounce to the ton, which under average circumstances in Westralia is a paying quantity. The Emerald Mine has been now fully paid up for by the purchasers, the sum handed over being £15,000 sterling. This, in spite of the big prices you are familiar with in London, is the largest money transaction in West Australian gold claims with which I am acquainted here at home. The general belief seems to be that the buyers have secured a profitable property.

From Coolgardie the most recent sensation—and sensations from that field are of daily, not to say hourly, occurrence—is the tremendous find at Edjudina, some 130 miles away beyond Kurnalpi. I am afraid to chronicle the superlatives one now receives from that glittering spot. Suffice to say that we never mention Wealth of Nations or Londonderry's now.

TIN TICKETINGS FOR 1894.—At the first ticketing on January 2, 1894, the average price was £42 13s. 2d., and at the last ticketing, on December 18, £35 9s. 5d.—a drop of no less than £7 3s. 9d. per ton. The following is a list of average prices for the year:—

	£ s. d.		£ s. d.
January 2	42 13 2	July 3	38 13 9
" 16	41 6 4	" 17	38 4 11
" 30	41 10 2	" 31	37 2 4
Feb. 13	40 18 10	August 14	38 0 8
" 27	39 3 8	" 28	39 17 2
March 13	40 9 0	Sept. 11	40 10 11
" 28	41 16 0	" 25	41 3 0
April 10	41 11 8	Oct. 9	39 16 8
" 24	40 12 3	" 23	38 2 0
May 8	42 0 9	Nov. 7	37 15 5
" 22	41 0 0	" 20	37 12 6
June 5	40 0 0	Dec. 4	35 9 5
" 19	39 5 0	" 18	35 9 5

The average price at the first ticketing in the New Year showed a further fall—viz., £34 10s. 11d.

STARTLING NEWS is daily coming to hand of sad accidents, murders, and minor criminal offences, but it is astonishing that thousands of people die in our midst every week, and no notice is taken of the fact. Yet such a terrible calamity could be prevented if more stringent attention was paid to the laws of health. If people would only deal seriously with slight ailments they would not develop into fatal diseases. There are thousands of persons killed yearly simply through neglect. Holloway's Pills and Ointment can prevent as well as cure disease, and if they were used according to directions, there would soon be a decrease in the death rate. They can be obtained from all chemists and medicine vendors.

## SOUTH AUSTRALIAN LETTER.

ADELAIDE, DECEMBER 4.

ALTHOUGH work is still going on at the Moonta and Wallaroo Copper Mines, the operations at those great mining centres attract but little attention from the general public. Gold mining is now the only kind that excites general interest, and that is certainly making steady progress in South Australia. The Kerkeek's Treasure Gold Mine, at Nillinghoo, about 25 miles north-east from the Alma and Victoria Mine at Wankaringa, has just had the first parcel of 5 tons of stone treated at the Government works at Mount Torrens. It was a long distance to send the stuff—about 280 miles—but the result was highly satisfactory, the 5 tons yielding altogether 33 ounces, including 4 ounces 5 dwts. yet to be extracted by the cyanide process from the tailings. From all that we hear we should not be surprised if the next 200 tons should yield 600 ounces of fine gold—perhaps more. It is, however, a singular fact that although gold has been found in other portions of the lode formation on this field, no other mine has yet turned out any quantity of payable stone.

The Wadnamanga gold field still holds its own, the past four weeks' crushing from the Virginia and Milo Mines gave 420 ounces 17 dwts. from 366 tons, being an average of 1 ounce 3 dwts. 2 grains per ton. These mines are improving in depth.

The Lux Gold Mine, 35 miles further east, is being worked on the open-cut system, and has a fine lode stripped ready for breaking down. Five head of stamps will be ready to start crushing on December 10.

The mines in the Mount Pleasant and Blumberg districts are going on fairly well, but the want of sufficient capital property to develop them is a serious drawback. A small parcel of lode-stuff was lately taken from the Golden Stope Mine, which yielded at the rate of 8 ounces of gold per ton. The adjoining Golden Stope West has also a rich lode, which will probably give as good results.

Half a ton of stone from Kangaroo Island, just treated by Messrs. Harrold Brothers, yielded 1½ ounces of gold. The value of the discovery, however, has yet to be proved, as there has been a certain amount of mystery connected with it, and no reliable report has yet been received from the place.

The discovery in the hills, 5 miles east of the City of Adelaide, has been rather unfavourably reported on by the Inspector of Mines, though he fully admits the promising appearance of the lode, but the samples he brought away for assay gave very poor returns. Other assayers, however, got payable results from duplicate samples of the same stone. I myself saw gold plainly in stone from the locality, and had a sample which was half limestone and the other half pyritous ore tested, which gave a return of 15 dwts. 13 grains of gold per ton.

Mr. T. E. Elder, the Chairman of the West Australian Minerals and Finance Company, left for Perth, West Australia, a week ago. Mr. Cuthbertson, the prospector, had preceded him. This gentleman has a good knowledge of the country, and is a good and reliable prospector. Mr. Elder has a high opinion of him.

## SPES BONA MINE.

(BY OUR JOHANNESBURG CORRESPONDENT.)

THE best mining engineers in South Africa are unanimously of the opinion that there is not one unpayable mine on the central section of the Witwatersrand, and this has been proved beyond doubt during the past 12 months. Take, for instance, the adjoining mines to Spes Bona, which formerly were worked unremuneratively, and in some cases at heavy loss, and now are leaving substantial profits. The George Goch is now making a profit of about £2500 per month; the Metropolitan, which until lately used to show a monthly loss of about £1000, now shows that amount per month profit from the battery alone; and the Wolhuter, on the western boundary of the Spes Bona, is making over £3000 per month profit, which in a few months' time will be increased to £5000. Naturally the question will be asked why all these mines are doing so well, and the Spes Bona up to the present has been a failure. The answer is easily found; it is due to inexperienced directors, insufficient development, and faulty machinery. There is not the slightest doubt that with good management and a heavy 50 stamp mill, the Spes Bona will be found equally as good and profitable in proportion to its size as its more fortunate neighbours—the Wolhuter and George Goch. One of the best mining managers on the Rand has recently made a most exhaustive inspection of this property, and he reports that, under careful management, the returns from the battery and cyanide should not be less than 15 dwts. per ton, and as the reefs are 3 feet wide, this will mean cheap mining, and should leave a clear profit of over £1 per ton. The company owns 22 claims on the Main reef, and on the basis of 40,000 tons of ore per claim, would leave a profit of £880,000 before being worked out, and, as the present market value of this mine is now considerably under £200,000, there is ample room for a big rise in the price of these shares.

Under the terms of reconstruction lately brought to a most successful issue by Messrs. Barnato Brothers, there would be about £15,000 in hand for working expenses, but the reserve shares having been sold at par, there will be fully £30,000 with which to start operations, and this amount should be sufficient to place the mine in the Dividend List. It is not at all unlikely that later an amalgamation may be effected with the Wolhuter, which would be distinctly to the advantage of both properties. Should this eventuate, the Wolhuter would then be able to erect extra stamps, which could be kept going by ore raised from the Spes Bona shafts.

The Spes Bona has to-day the lowest market value of any of the mines in this rich central section of the Rand; and, strange to say, the shareholders were evidently alive to this fact, for under the reconstruction the old shareholders took up every share in the new issue, not one being allowed to fall into the hands of the guarantors. This company has now one of the best lists of shareholders of any in South Africa; and this, combined with the placing of the management into the hands of men with vast mining experience, and the appointment of a local board of directors at Johannesburg of experience, should ensure the future success of the property beyond all expectations.

SOUTHERN GOLDENHUIS COMPANY MEETING.—Mr. Alfred Lewis, of the Lewis Mining Investment Trust (Limited), wishes us to state that he was not the Mr. Lewis who spoke at the recent meeting (reported in our last issue) of the Southern Goldenhuis Company.

MINERS' WAGES IN NORTHUMBERLAND.—A meeting of the conciliation board, representing the Northumberland coal-owners and the miners, was held at the Coal Trade Office, Newcastle-on-Tyne, on Saturday, Mr. John Strachan, the official umpire presiding. Those present included Mr. R. O. Lamb, Mr. T. Bart, M.P., and Mr. C. Fenwick, M.P. A reduction in the men's wages of 1½ per cent. was decided upon.

## REVIEWS.

Report of the Proceedings of the Flameless Explosives Committee. Part I. Air and Combustible Gases. (Andrew Reid and Co., publishers, London and Newcastle-on-Tyne.)

We have before us this most valuable and interesting report just issued by the North of England Institute of Mining Engineers, and which is the result of a long series of experiments, extending over a series of six years, having for their object to determine whether what are known as flameless explosives, or more recently safety high explosives, were incapable of igniting fire damp and coal dust, and were consequently safe for general use in mines. In order to imitate as nearly as possible the conditions prevailing underground, the explosive gaseous mixtures were made in an iron tube 3 feet diameter, and 101 feet long, having numerous glass protected observation holes along its whole length. The firing of the various explosives under test was made in a steel cannon, the mouth of which projected into the end of the cylindrical iron chamber, representing an underground working, and which was filled with a mixture in varying proportions of either coal dust and air, or fire damp and air. The proportion of gas to air was most carefully measured for each experiment, and a perfect mixture obtained by circulating them through the chamber by means of a Schiele fan.

The erection of the experimental works, and construction of the apparatus, took up nearly four years of the time, and it was not until June, 1892, that they were in such a state of efficiency as to enable the experiments to be made, and these experiments were limited to the behaviour of such explosives as were generally embraced under the terms flameless or safety. There are six in number, viz., ballite, securite, ammonite, roburite, carbonite, and Ardeer powder. The experiments were made with both stemmed and unstemmed shots, fired into explosive mixtures of air and coal gas, or of air and pit gas, and the results obtained, with varying proportions, are most carefully tabulated. The flames given off by the explosives were also observed by assistants placed at the sight-holes left along the side of the firing chamber, and the length of the flame, when the shot was fired in air, or a mixture of air and gas, is carefully recorded. Experiments were also made with detonators, in many of which both coal gas, and air, and fire damp and air, were ignited by detonators, containing 154 grains of fulminate of mercury. In all the trials the explosives were fired by means of high tension electric fuses, as the inquiries previously made by both a Prussian and French Commission, had determined the fact that the sparks made in igniting the ordinary tape fuses were capable of igniting fire damp, and it was, therefore, considered unnecessary to make a further series of experiments on this point.

The various trials were made under the superintendence of Mr. J. L. Hedley, H.M. Inspector of Mines, and Mr. A. C. Kyall, the engineer to the committee, while valuable assistance in subscriptions, use of premises, materials, &c., was given to the Institute by the Durham Coal Owners' Association, the Northumberland Coal Owners' Association, and several coal and engineering companies and private firms. A plan of the arrangements made for conducting the experiments is attached to the report, which terminates with the conclusions deduced from the experiments and numerous tables summarising the whole number made. The information which has thus been obtained almost regardless of labour and expense is of an extremely valuable nature, and we can strongly recommend all those interested in collieries to procure a copy of the report, and make a careful study of it.

## METALLURGY FOR STUDENTS.

Elements of Metallurgy. By W. Jerome Harrison, F.G.S., and William J. Harrison. 250 p., foolscap 8vo., 2s. 6d. (London: Blackie and Sons, Limited.)

This little book has been written on the lines laid down in the syllabus for metallurgy as prescribed by the Government Department of Science and Art. Mr. Jerome Harrison is a science teacher of some 30 years' standing, a practical geologist and mineralogist; and his son, Mr. W. Harrison, an Honourman of the Science and Art Department in the same subject, has studied metallurgy, theoretically and practically, at the Midland Institute. The result of their collaboration is the best elementary book on the subject we have seen. Admirably clear in text and illustration, it fills a long-felt want—a textbook on mineralogy and metallurgy treated in a simple and practical manner. The book is divided into four sections under the headings "Introductory Subjects and Fuel," "Iron and Steel," "The Precious Metals," and "Metals Other Than the foregoing." The papers set at the Science and Art examinations form an appendix, in which the questions are divided into four sections, corresponding to the four of the book, the object being that each student may confine himself mainly to that branch of the subject with which he is, or supposed to be, practically familiar.

MEXICAN MINERAL RAILWAY COMPANY.—A meeting of the first debenture-holders of this company was held on Tuesday, at the offices of the company, 32, Old Jewry, E.C., for the purpose of approving a provisional agreement already entered into by the Palmarajo Mining Company (Limited) and the Mexican Exploration (Limited), providing for the amalgamation of the interests of these companies, and for insuring to the holders of first debentures substituted first debentures secured on the whole undertaking, and for postponing the time of the redemption of the said debentures.—Mr. F. Pigou, who was voted to the chair, observed that the scheme of amalgamation, as it affected the first debenture holders, was that there should be an issue of £155,000 first debentures in the Palmarajo Mining Company, and the Mineral Railway first debenture-holders should take the equivalent—that was, £30,000 of that £155,000. There were several reasons why they should adopt the course suggested. If the amalgamation were carried out, they would save some thousands of first debentures, which would be contributed by the Mexican Explorations from the first Palmarajo debentures now held, as an equivalent for giving up of a guarantee on the first debentures of the Palmarajo Company. He believed that if the scheme were carried through, the result would be satisfactory, both to the debenture holders and the shareholders. In conclusion, he moved a resolution approving of the agreement.—Mr. Applegarth seconded the motion, and a long discussion ensued.—Mr. T. Southcott, Chairman of the Palmarajo Company, promised that matters for protecting the interests in the future of the railway debenture-holders should go to arbitration if necessary.—Mr. J. F. Popham contended that the agreement was for the benefit of the Palmarajo Company and its first mortgage debenture-holders.—Mr. J. W. Hart moved an amendment appointing a committee, which was put to the meeting and negatived; and, ultimately, on the motion of Mr. Applegarth, the following was adopted: "That, having regard to the discussion which has taken place, and to the disposition shown by all present to adopt the amalgamation, that this meeting be adjourned for three weeks, and that, in the meantime, four bondholders meet and confer with the board.—Mr. Halford, Mr. Johnson, Mr. Hart, and Mr. Popham were appointed a committee."

AFRICAN TRANS-CONTINENTAL TELEGRAPH.—The Portuguese have ceased to obstruct the progress of the African Trans-Continental telegraph, and the line is expected to reach the Zambesi this month.



## MEETINGS OF MINING COMPANIES.

## VAN RYN GOLD MINES ESTATES, LIMITED.

The proposal to sell part of the property.—Major Cotton demands a poll.

A N extraordinary general meeting of the Van Ryn Gold Mines Estates (Limited) was held on Saturday, at Winchester House, Old Broad-street, E.C., Mr. F. A. GILLAM presiding. The SECRETARY (Mr. Stuart James Hogg) read the notice convening the meeting.

The CHAIRMAN, at the outset, expressed his regret that Mr. Bewick was unable to preside, owing to ill-health, and then proceeded to call upon the solicitor to read the agreement made between the company and the Van Ryn West Mining Company (Limited) for the sale of a portion of the company's property, adopted at the previous meeting, and also at either from Messrs. L. Hirsch and Co. Mr. H. COOKE (the solicitor) read the agreement, together with the following letter from Messrs. L. Hirsch and Co.:

Warnford-court, Throgmorton-street, London, E.C., January 2, 1895.

To the Chairman and directors of the Van Ryn Gold Mines Estate (Limited).

Gentlemen.—Referring to our offer made at the meeting of the company on the 21st ult., and repeated in our Mr. Hirsch's action against the company, we now beg to make the following improved offer for the property the subject of the agreement made between your company and the Van Ryn West Mining Company (Limited). We will form a company with a capital of £100,000, divided into 100,000 shares of £1 each, of which your company shall receive 80,000 fully-paid shares as the purchase price of the property. We will guarantee the issue of 50,000 shares, to be offered to the shareholders of your company at 30s. per share in consideration of our having an option over 20,000 shares for three months at 32s. 6d. per share, and over 20,000 shares, the balance of the capital, at 35s. per share for six months. The terms in all other respects to be the same as those embodied in the above-mentioned agreement between your company and the Van Ryn West Mining Company (Limited). We are ready to enter into a formal agreement to this effect, and, if required, to furnish any reasonable guarantee for the due fulfilment of our obligations.—Yours faithfully,

(Signed) L. HIRSCH AND CO.

The CHAIRMAN then said—Gentlemen, the business before the meeting is a simple one, and I do not think I need detain you very long with any remarks of mine. We are sorry to trouble the shareholders again, but this meeting is rendered advisable owing to proceedings taken against the company and directors by Messrs. L. Hirsch and Co. In these proceedings it was alleged that the notice convening the meeting held on the 21st ultimo was informal, and that the resolution agreed to at that meeting was invalidated because one of the directors, who seconded the resolution, did not declare his interest in the new company. As a consequence of these proceedings it has been thought advisable to call you together again, so that if you confirm the resolution of the previous meeting the litigation will, we hope, be put an end to; but it must, as I am advised by counsel, be understood that if this meeting reject the motion the company cannot entertain fresh proposals for the sale of the property in question until the present agreement has been disposed of in the law courts or released by the parties. I am informed that the new company has entered into a guarantee to subscribe for the new shares. The directors leave the matter entirely in the hands of the shareholders, but they will, of course, be happy to answer any relative questions which may arise. I now beg to move the following resolution:—

That the agreement dated December 21, 1894, and made between the company and the Van Ryn West Mining Company (Limited), for the sale of a portion of this company's mining rights and property in Africa, be and is hereby approved and confirmed, and that the directors of the company be and are hereby authorised to carry the same into effect.

Mr. BEWICK seconded the resolution.

Mr. VAN RYN said that he did not wish to conceal the fact that he was interested in the guarantee. Had he had such a desire it would have been an easy matter to have had the guarantee made out in another name. He considered it an advantage to the shareholders of that company that he was interested in the new company, because he would protect the interests of the shareholders of the Van Ryn Company.

Major COTTON proposed an amendment to the effect "That the meeting be adjourned until Tuesday, the 22nd instant." He said that all the shareholders had received a copy of his circular, so that he would not waste the time of the meeting by reiterating the views which he and a large number of shareholders entertained in regard to this matter. He might, however, state that he had received considerably over 100 proxies, and a large number of other proxies which had arrived too late to be lodged in time for the meeting. Many of the independent shareholders considered that in a company in the strong position in which theirs was it was unnecessary for them to give the call of 50,000 shares for the long period of two years to an inside group. It would be very desirable that the Chairman should inform the meeting who the gentlemen were who were interested in this group. West Van Ryn shares were now quoted at £1 premium over the price at which they were offered to the shareholders, and he failed to see why they should give away £50,000 to a certain inside group, even at the present price of the shares. After two years it was possible that these shares might be quoted at £10 premium, and this meant that they were to give away perhaps £500,000 of money to certain people for guaranteeing shares which now stood at £1 premium over the price at which they were guaranteed. Mr. Van Ryn informed the shareholders at the last meeting that they had £60,000 in the bank. In the event of additional capital being needed, he contended that more shares should be issued to the shareholders at a price which would give them some bonus. Messrs. Hirsch and Co. were perfectly willing to fall in with this view, and they said, and he also said, that if the property were to be sold, let it be sold to those who were ready to give the best price. He, therefore, moved the adjournment of the meeting.

Mr. TAPP seconded the amendment, and said he thought they had a valuable property, and it would be a pity to have any litigation in the matter, and, speaking as an independent shareholder, who represented large interests in the company, he would suggest a compromise. Messrs. Ochs and Messrs. Hirsch might possibly arrive at a joint proposition midway between the 70,000 shares and 80,000 shares, and share it amongst them, or, if those gentlemen could not come to terms, he would suggest that the directors should send out a statement of the two propositions, and ask each shareholder to state which one he preferred.

Mr. STERSON said that, as business men, they had to bear in mind that the number of shares that they obtained for their property meant nothing; but what meant a good deal was the value of those shares. The reason that their shares had increased in value from 10s. to £5 was, he believed, because the company had behind it the gentlemen who were making the present offer to purchase a part of their property, and, therefore, he considered that it was infinitely better for the shareholders to trust gentlemen they knew than to trust those they did not know. Even if Messrs. Hirsch and Co. should offer £50,000 more for the property, he should still support the present proposal, because he knew that it would be properly managed. He, therefore, urged the shareholders, in their own interest, to support the resolution.

The CHAIRMAN remarked that, with the exception of Mr. Van Ryn, not a single director was interested directly or indirectly in the proposal before the meeting.

The amendment was then put to the meeting, and lost by a large majority, only seven shareholders voting in favour of it.

Major COTTON demanded a poll on the amendment.

The SECRETARY stated that the board had received in favour of the motion proxies from 98 shareholders, representing 91,403 shares, and against it proxies from 100 shareholders, representing 13,226 shares.

Major COTTON appointed himself scrutineer, and stated that he had a perfect right to satisfy himself that all the shareholders who took part in the proceedings had paid their calls.

The CHAIRMAN announced the result of the poll as follows: For

the amendment, 13,862; against (excluding Mr. Van Ryn's shares) 96,867.

Major COTTON protested against the result, on the ground that he had not had an opportunity of examining the proxies, votes, and books.

The original resolution was then put, and carried by 16 to 14. Major COTTON again demanded a poll, and appointed himself as scrutineer.

The poll was then taken, and the CHAIRMAN announced that the result would be declared on Tuesday next at Winchester House, at four o'clock.

## KINSELLA GOLD MINES, LIMITED.

Prospects of the property.—"Plenty of water."

The statutory general meeting of shareholders in the Kinsella Gold Mines (Limited) was held on Monday, at Winchester House, the chair being occupied by Mr. NICOL BROWN.

The SECRETARY read the notice convening the meeting.

The CHAIRMAN said: Gentlemen, as you are aware, the principal object of calling you together to-day is to conform to the Act of Parliament. The company was registered on September 15, 1894, and the prospectus was issued and the list of applications for shares opened on September 26 and closed on the 27th, the letters of allotment being sent out on September 28. The capital is £30,000 in 80,000 shares of £1 each; 43,000 fully-paid shares were allotted to the vendors in part payment of purchase-money, and the balance of 37,000 shares has been allotted in full for cash. Of these, 12,235 shares were applied for before the issue of the prospectus, and were allotted in full. The applications from the public for the balance of 24,765 shares amounted to 34,998 shares, so that the capital was considerably over-applied for. The number of shareholders at the date of allotment was over 300, and is now over 400. The purchase price of the property—namely, £17,000 in cash and 43,000 shares—has been paid, and it was taken possession of by Mr. Grey, on behalf of the company, on October 16 last, since when the formal transfer of the leases into the name of the company has been registered. The amount of cash received to date is £33,887 5s. The amount of calls unpaid at date is £3112 15s. The last call of 5s. was payable on December 29 last. You have already been advised that a new property—namely, the Hidden Treasure, consisting of 12 acres, adjoining the Kinsella property to the north, has been acquired for £1000, and an application has been made to the Government for a 24-acre lease adjoining Kinsella to the east. The total area of the property, when this lease is obtained, will be 57 acres, as against 21 acres comprised in the original scheme. The 24 acres to the east have been applied for in order to secure the ground on the dip of the reef, which, although in parts nearly vertical, has a dip to the east. Copies of Mr. Grey's full report have been sent to you, and we have since received further information from him by letter and cablegram to the effect that he has commenced work in the mine, and is sinking a main shaft. The number of men required to be kept working on the mine to fulfil the Government conditions is 19, and their estimated wages per month are about £300. Mr. Grey, our acting manager at the Kinsella Mines, reports as follows:—"Length along line of reef of three leases first purchased, 2564 feet; Hidden Treasure, 990 feet; total length along line of reef owned by the company, 3554 feet." Of this total length Mr. Grey reports 1000 feet payable on the three first leases, and 150 feet in the Hidden Treasure. He estimates the value of the ore in the first three leases at 1½ ounce per ton, and in the Hidden Treasure at 15 dwts. per ton. Much thought and consideration have been given by your board and the engineers, Messrs. Freshville, to the proper opening up and equipment of the mine. Hoisting machinery has been purchased, consisting of a new Tange double 12 inch winding engine, and two Cornish boilers of 18 and 22 h.p. have also been purchased. Messrs. Freshville have been able to buy these in Sydney. If they had been ordered and specially made in England it would have delayed the delivery at the mine, including the longer period for transport, for four months. The battery installation is under consideration, and will be ordered and shipped immediately, and erected without delay. With regard to the water, there is no doubt there is a plentiful supply there. It has been cut in all the shafts, and this is the latest advice from the mines about the sinking of the shafts. It has only come to hand this morning, and is as follows:—

As regards exemption, that has been granted to us on the new block to the east, and the Kinsella North and Hidden Treasure are still under exemption, so that we have only to keep the Kinsella and Nil Desperandum leases manned. This means six men, but there is ample work for them. As previously notified, we have commenced to sink a main shaft just on the boundary line between Nil Desperandum and Kinsella, and this shaft is now 45 feet deep, and is just down to water level. We have now to wait until the timber, which is already on the way from Geraldton, arrives. The shaft is to be 12 feet by 4 feet inside the timbers, and will have room for a double skip road, ladder road and 8 inch column. I hope you will send out a pair of winding engines as soon as possible.

There is also a good supply of fuel for present purposes. Mr. Grey has been acting for us until we could secure a suitable permanent manager. We are now negotiating with a manager, at present engaged in an Australian mine, who has been highly recommended, and is likely to fill the post in an efficient manner. On enquiry being made at the office of the Agent-General for Western Australia in London, regarding the extension of the railway from Mullewa to Cue, the following letter was received from him:—"Dear Sir,—In reply to your letter of yesterday's date, asking for information with regard to the extension of the railway from Mullewa to Cue, I am directed by the Agent-General to inform you that he has no official information beyond that appearing in the public Press of the colony, which is to the effect that the work will be pushed forward without unnecessary delay.—Yours faithfully (signed), R. C. HARE (Secretary)." Well, gentlemen, most of you, too, saw what appeared in the public prints. It was to the effect that the Government were asking for tenders for the construction of this line of railway. I have nothing further to add, but I shall be glad to answer any questions. (Applause.)

Mr. MORRISON asked whether the Chairman considered there was sufficient working capital to develop the mine and bring it into a dividend-paying condition.

The CHAIRMAN replied that very careful estimates had been made by the engineers of the company, and while it must be admitted they had not too much money, he thought they had enough. Every attention would be paid to the complete development of the mine, and they expected to be able to put up 10 stamps with the money now in hand.

A vote of thanks to the Chairman terminated the proceedings.

MYSONE REEFS GOLD MINING COMPANY (LIMITED).—An extraordinary general meeting of the shareholders in the Mysore Reefs Gold Mining Company (Limited), was held on Monday, at the offices, 6, Queen-street-place, for the purpose of considering, and, if thought proper, confirming resolutions voluntarily winding up the company for the purposes of reconstruction, passed at a previous meeting.—Mr. J. Harvey, who presided, briefly moved the resolutions, which were seconded by Mr. Barclay Harvey, and carried unanimously.—The Chairman said that the reports just received from the other side were of a very satisfactory nature. One telegram stated:—"43 tons quartz crushed has yielded 81 ounces of retorted gold." The second ran:—"325. Width of lode 1 foot 8 inches, assaying 2 ounces 5 dwts. per ton. In the bottom of winze, width of lode 2 feet, assaying 4 ounces 2 dwts. per ton." These reports were of a very pleasing character, and he might further read an extract of a report from the mine, dated December 19:—"The lode in the 325 feet level north of underlie shaft continues to look well. The quartz is from 15 to 18 inches wide, and the value from 15 dwts. to an ounce of gold to the ton. The rock at this level, and the quartz is not so much intermixed with iron pyrites as it is in the level above."—A hearty vote of thanks to the directors, proposed by Mr. Swaffield, concluded the proceedings.

## WEST AUSTRALIAN DEVELOPMENT CORPORATION, LIMITED.

A good beginning.—Prospects of West Australia.

The statutory general meeting of the shareholders in the West Australian Development Corporation (Limited) was held on Wednesday, at the Westminster Palace Hotel, the chair being occupied by Sir WILLIAM YOUNG.

The SECRETARY (Mr. H. E. Walker) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen, as you are probably aware, this meeting is usually called to conform with the Act, which prescribes that you should meet together within a specified time after the date of the incorporation of the company. From time to time you have been advised of the progress of the corporation, which was formed for the purpose of acquiring valuable lands under very favourable conditions in Western Australia. Like other ventures of a similar character to our own, it is part of our business to dispose of portions of our lands, as occasion offers, from time to time to other companies; and, under certain circumstances, the corporation will also form companies to work and develop its territories. We have received many offers to acquire interests controlled by the corporation, and with some we have closed, and with regard to several of these negotiations are still pending. The corporation, as a parent company, has identified itself more particularly with an undertaking which will be shortly offered for public subscription, and which will, I hope and believe, be the means of placing a very considerable sum in cash and shares in the coffers of this corporation; this transaction alone, if successful—and I know no reason why it should not be carried through—would enable your board to more than repay the original capital, and leave a large amount to the credit of the company for future operations. We are at liberty to say this much—that the scheme is so far advanced that the directors and officials have been selected, and have given their consent to act, so that this scheme is nearly ready to be launched, and this will be done as soon as the conditions of the market warrant the issue of the prospectus. As some of the shareholders would appear to be doubtful on one point in connection with the corporation, I think it, perhaps, advisable to inform you that, although the new undertaking which I have just mentioned is formed to acquire certain properties now vested in this corporation, it is not intended that it should absorb the whole of our interests; therefore, not only will this parent company reap considerable profit from the transaction, but its position will be strengthened by the building up of a reserve fund from the surplus profits—which will enable it to vigorously carry out the objects for which it was formed, viz., the acquisition and development of West Australian lands and mining properties, and their disposal and working, for the benefit of the proprietors. I need not enter at length into the question of the great interest which has been awakened in connection with Western Australia and its mineral resources; facts and figures which are given daily in the leading organs of the Press will have already acquainted you with the strides made in that colony during the last few months, and, in the opinion of those best able to judge, and who have had a life-long experience in mining matters, Western Australia bids fair to rival the marvellous growth and wealth of South Africa. But a few years ago the Transvaal was producing less gold than Western Australia at the present moment, whilst now she is the second largest gold producer in the world, and it is not improbable that the progress in Western Australia will be even more rapid. Considering the valuable interests acquired by this corporation in Western Australia, and the increasing price of land in that country, we are justified in anticipating for our enterprise a prosperous and profitable career. That we are not alone in thinking so is evidenced by the fact that a premium of 10s. was readily paid for the shares acquired by the public. Of course, they could not be purchased at that price now; in fact, it would be difficult to say what their value will be, as soon as negotiations I have foreshadowed are successfully carried through in your interests—I may say our mutual interests, for we are all financially interested in the corporation, some of us very heavily. The board carefully scrutinises any proposals which come before it to deal with our properties, but, of course, where a substantial sum is paid for the right of prospecting over our mineral lands with a view to the formation of subsidiary companies by third parties, the board naturally does not refuse to accept a good offer. Under one contract of this nature we are enabled to announce a dividend equal to 100 per cent. per annum, and you will receive your dividend warrants within the next few days. We could have paid even a larger dividend, but the board have preferred to adopt the more prudent course, and retain a substantial balance of profit in hand, and I hope when next I meet you I shall be in the happy position to congratulate you on even more substantial success. There is no doubt of the richness—the extraordinary richness, in fact—of the reefs which have been discovered in Western Australia, and the large returns of gold now being made by mines which have only been worked a few months, and that under great difficulties. As the work progresses, and the mines are developed, and greater facilities are offered in the matter of water, fuel, carriage, roads, &c., Western Australia should come to the front as one of the largest, if not the largest, gold-producing country in the world. Of course, as you know in all newly-discovered gold mining countries, the progress and development are not confined to the mere matter of mining only. New townships spring up, and the old-established cities suddenly take a new lease of life, and participate in the general prosperity, with the result that the adjoining lands as well as the outlying districts of towns like Perth and Albany acquire additional value. This has been particularly demonstrated in our own case, where the value of one estate has increased nearly 700 per cent. There is no doubt that it is only a question now of a comparatively short time when West Australian ventures will be in as great favour on the Continent as they are in this country. History more or less—more than less—always repeats itself, and the history of the opening-up of the Transvaal and gold mining industry in South Africa will, no doubt, be repeated in the case of Western Australia. But a few years ago, about 1887 or 1888, no one in this country would have anything to do with the new gold finds in the Transvaal. As soon, however, as returns began to be made, the capitalists and mining men saw what a great future laid in front of South African mining, and a change soon came over the scene, and there was the usual rush to secure interests. I need not go at length into the history of South African mining; you all know the tremendous premiums that are now being paid for shares in Transvaal mining companies. I only wish to point out to you that it is by no means improbable that the same story will be repeated in the case of Western Australia, so that those who are fortunate enough to come into Western Australian enterprises now will, no doubt, reap the benefit not long hence, when Western Australia will be as popular as its rival to-day. I find that there have been, roughly speaking, about 70 companies floated in England during the last few months to work West Australian gold mining and other enterprises, and over three-quarters of a million of actual cash has been subscribed for the purposes of development, while the gold output in Western Australia is increasing rapidly. I do not think I need detain you any longer. We have conformed to the requirements of the law, and I have had the satisfaction of making what I hope you consider a favourable announcement, which will be welcome news, not only to those present, but also to our shareholders in Scotland and Ireland, and more distant parts of the world.

Captain IVORY, having congratulated the Chairman upon the admirably lucid manner in which he had put the facts relating to the corporation before the meeting, said he had every faith in the future of the undertaking. Having been associated with it from the commencement, he was assured that the interests of the shareholders were thoroughly protected. There was, undoubtedly, an enormous field in Western Australia for the employment of capital, and, as to the analogy which the Chairman had drawn between South Africa and Western Australia, he thought the balance of pro-



ability for the future largely in favour of the latter country. Being one of our colonies, it was more likely to successfully attract British capital, while he thought there was a larger, and more legitimate field for investment. One of the leading men in Western Australia, a manager of one of the most important railways there, in answer to a remark that the capitalisation of the country might be overdone, had said:—"I have been 26 years in Western Australia, and I know the country as well as anybody knows it, and my answer to your remark is that the whole of the capital raised at the present time is not sufficient to scratch upon the surface of Western Australia." This statement he believed to be quite correct. (Hear, hear.) He might quote the remarks of Mr. D'Orsey, who had said the specimens of gold lately exhibited from the Londonderry were not only very rich, but much more promising for permanency in depth than any specimens he had ever before seen, notwithstanding that he had examined those in the north of South America and in South Africa. The ore was large and wide, and the mass of quartz was thoroughly impregnated with coarse gold. Experience had shown that gold of this sort was much more likely to be permanent in depth than flaky and scaly gold. In conclusion, he might express his sense of the wisdom which had deterred the Chairman from showing the hands of the directors at so early a stage.

Mr. RAWLPE said the manner in which the business of the corporation had been carried on must commend itself to all the shareholders. As with all new gold fields, a scare might arise in connection with Western Australia, but they all knew what was at first said about the Transvaal gold fields and would know how to value it. The extension of the railway could hardly fail greatly to assist the operations of the company. He should be glad if the Chairman, in his reply, would give them some forecast of what dividends they might expect in the future.

Mr. NEALE enquired whether the shareholders in the original company would have preference in subscribing for the shares of the new company.

The CHAIRMAN, in reply, said he could not pledge the directors to the payment of dividends at any regular intervals, but he could assure them that so soon as they were justified in declaring another dividend they would have infinite pleasure in doing so. As to Mr. Neale's question, the shareholders in their own company would certainly have preference in the subscription for the shares in the new company. He could only express the hope that their subsequent undertakings would progress as favourably as at present.

A vote of thanks to the Chairman terminated the proceedings.

### WAIHI GOLD MINING COMPANY, LIMITED.

Capital to be increased.—Prospects unusually brilliant.

An extraordinary general meeting of the shareholders in the Waihi Gold Mining Company (Limited) was held on Wednesday, at the Cannon-street Hotel, E.C., to consider proposals for increasing the capital of the company.—Mr. THOMAS RUSSELL, C.M.G., presided.

The SECRETARY (Mr. Charles Akers) read the notice convening the meeting.

The CHAIRMAN, at the outset, said since their last meeting the position and circumstances of the company had changed considerably; the prospects of the mine, then good, had much improved, a large amount of work had been done upon the reefs in the lowest level, enormous bodies of ore of great value had been opened up, and the outlook for the future was highly satisfactory. Up till now the cost of deadwork, plant, and machinery had come largely from the profits of the mine; indeed, for the last two years entirely from the profits. The effect of this system had been two-fold. In the first place, it had diminished the profit fund available for dividends, while, on the other hand, the work of exploring and developing the mine had been necessarily confined to a small area, for want of sufficient money to deal with more extended works on a scale commensurate with the extent and importance of the property. The alternative before them was the establishment of a development fund, from which the cost of the necessary works should, in the first instance, be paid. The money for this fund was to be provided by the issue of shares. A large number of the shareholders had pressed for more rapid development, and the directors, upon full consideration of all the circumstances, had decided not to delay until the annual meeting the decision of that important question. At the time of their meeting they had just received the report of the cutting of the Martha and Welcome lodes in the No. 1 level. The size and value of these lodes at this level and of the Welcome lode throughout the mine were new features in the present satisfactory position of the mine and its prospects. The total mining area held by the company was 396 acres, in one block; the Martha section of about 236 acres, and the Union section about 160 acres. While these properties adjoined, the reefs in each were quite separate—two distinct systems, involving different mining questions, and they required distinct sets of works. He proposed to deal now for the most part with the Martha section, which contained about 3500 feet in length on the strike of the lodes. There were in that section at present two lodes in hand—the Martha and the Welcome. They ran north-east and south-west, with an underlie to the south-east of about 1 foot in 10 feet. The shaft was on the south-east side of the lodes, and had been sunk to a depth of 174 feet below the adit level, and 94 feet below the No. 1 (lowest level). Seeing that it was sunk deeper, it would, in consequence of the underlie of the lodes, intersect both the lodes. The adit was the lowest level from which the water ran from all the other workings and was their waterline. No. 1 level was opened from the shaft at 80 feet vertical below this waterline, and had been driven at an angle from the shaft for a distance of 214 feet towards the Martha lode. In driving this level to cut the Martha lode they had unexpectedly cut the Welcome reef, and 47 feet from the Welcome reef, and northward of it, they cut the main or Martha lode, which at the point of intersection was 28 feet 6 inches in width. Just where the level or tunnel from the shaft cut through the reefs he would refer to as the crosscut, and the measurements of the work upon these reefs eastward or westward would be reckoned from this crosscut. The first reef met with in the drive was the Welcome reef, 50 feet on the south side of the Martha lode, and running nearly parallel with it. Upon it in this level they had driven westwards from the crosscut for 247 feet and eastward for 30 feet, or a total of 277 feet. Several winzes had also been made between this reef in the adit level and the lower level, so that they had done a good deal of work upon it. The average width of the stopes upon this reef in the No. 1 level was 6 feet; it was larger in the adit level overhead. A block went to the mill with the Martha ore—several thousands of tons—during the last month of the year, and the ore milled from these two lodes yielded an average of over £4 per ton. All through the property the reef was intact. After cutting it in the No. 1 level they had found and driven upon it and the adit level. The quartz had been broken out, and the drive straightened on the course of the lode for a distance of 90 feet back to near No. 2 winze. For the most part this ground had produced a first-class quality of ore from 9 feet to 10 feet in width. Upon the Martha reef in the No. 1 level they had driven from the crosscut westward 462 feet, and eastwards 186 feet, or a total of 648 feet in the lode throughout. Reckoning the underlie of the reef, the block between this level and the adit would give them backs of about 90 feet in height. It had been intersected by several winzes. The leading stope on the Martha reef in this level was 372 feet long, and averaged 20 feet in width throughout; but this leading stope westward of the Britannia winze for the whole length of the stope averaged 22 feet in width. In the eastern face the reef was 11 feet wide, in the western face 21 feet, and they were informed that the grade of ore and the appearance of the ore body in this level were very good, and that the ore in sight averaged about £4 per ton. In the floor of the drive in the No. 1 level a winze in the reef had been sunk for 7 feet 6 inches to ascertain its quality below, and the ore at 7 feet deep in that winze assayed at the rate per ton of 2 ounces

2 dwts. 11 grains of gold, and 5 ounces 12 dwts. 18 grains of silver. The No. 1 level had thus proved to be good, and there were strong indications that lower levels would also be good. The shaft was now 94 feet below the No. 1 level. They had directed that it should be sunk deeper, and at the same time that this sinking was going on they would below open No. 2 level from the shaft to cut the reefs in that level. Their expectations of the lode holding its quality downwards were supported by the following facts:—(1) That the lode had improved in quality from the top of the hill downwards; (2) that the lowest level of all—No. 1—was the richest and best; (3) that the country rock in the shaft was of the quality of soft sandstone—most favourable for gold-bearing reefs; (4) that in the small winzes in the No. 1 level, quartz worth over 2 ounces per ton was found at the bottom of the winze. Mr. Spratt had estimated the available ore in sight from the surface down to the No. 1 level at 300,000 tons. A reckoning based upon the work done in the lower level showed the contents of that block alone to be 126,000 tons, less the few thousand tons that had been crushed therefrom. Working 60 stamps in 1894 they milled 26,000 tons of ore, and in May next they would have 90 head of stamps running. Proceeding on the assumption that with the 90 head they would mill a proportionate quantity, they would treat at the rate of 40,000 tons per annum. Having made full allowance for waste ore, there was a seven years' supply in sight for the present mill, increased to a capacity of 90 stamps. By extending the adit level through the Martha Hill, which could be done rapidly and cheaply, and by cutting up the lode above it into blocks, they would very soon make still further large quantities of ore available. Besides this, they would begin this month to open from the shaft the No. 2 level, of equal depth with the No. 1, and in a few months the shaft would be sunk sufficiently deep for opening a third level, so that there was no doubt of the enormous quantity of ore in sight and close at hand awaiting treatment; and the only questions remaining were the quality of the ore, and how speedily they could, by largely increasing their milling power, turn it into money. Passing on to deal with the directors' proposals for the future, the Chairman said they had entered into contracts for the addition of 30 head of stamps to the mill, thus increasing the number of stamps to 90 head. In addition, they would have to take steps for further opening up the mine in other parts of the property. Probably the eastern end of the Martha section could be worked from the present main shaft, but they would probably have to sink another shaft on the western side of the property. But little was known of the 1500 feet west of the present works, but they did know that in several places there the Martha reef contained ore of high quality. There remained for further consideration that part of the property described as the Union section, containing 160 acres, upon which a good deal of work had already been done, but which they were obliged to leave for a time for want of money. The Union section contained good lodes, in some parts rich, and it also contained the large Amaranth reef, about 20 feet in width, quite unexplored. Probably they would shortly organise here or in New Zealand a sub-company for working this property. He would remind the shareholders of the great possibilities in connection with the Waihi Mine. They were, of course, not dealing with mathematical certainties, but with a great mining undertaking of exceptional interest and value, and the possibilities in that connection were enormous, and must be reckoned by anyone disposed to form a correct estimate of the value of the venture. He had been connected with gold mining in New Zealand for 40 years, and was a director of the famous Caledonian Mine, in which the richest bonanza known in the history of gold mining was found, and from which within one year afterwards they distributed dividends to the extent of £650,000. The Waihi was a greater mine; he had not known a greater. (Applause.) In provision for the necessary outlay in connection with the works to which he had alluded, the directors had agreed to issue 10,000 new shares of £1 each, at a premium of £4 per share. They had made the terms so easy as to make the issue to the shareholders a source of profit and not a burden. (Applause.) The Chairman then moved a series of resolutions, providing for the increase of the capital of the company to £160,000, by the creation of 10,000 new shares of £1 each, to rank *pari passu* with the existing capital for all purposes.

Sir EDWARD STAFFORD seconded the motion, which was carried unanimously, and a vote of thanks to the Chairman terminated the proceedings.

### WENTWORTH GOLD FIELDS PROPRIETARY COMPANY.

Extraordinary general meeting.—Confirmation of resolutions.

An extraordinary general meeting of this company was held on Wednesday, at Winchester House, for the purpose of confirming the resolutions passed at the meeting held on December 17.

Admiral FREDERICK A. MAXSE, who presided in the absence of the Right Hon. the Earl of Kilmore, formally put the resolutions.

Mr. J. K. PERRY seconded. Lieut.-Col. W. H. BROWN urged that before the 20,000 new priority shares were issued the shareholders should be called together and consulted. He thought the great thing they had to consider was the restoration of public confidence in the company, and that the fact of there being 20,000 shares hanging over the market would operate adversely on the market price. Three years ago the returns from the property were not nearly so good as they had been since, but as the returns increased, the prices seemed to fall.

The CHAIRMAN said the directors were in no sense responsible for the market price of the shares.

Lieut.-Col. BROWN said he did not suggest that they were.

The CHAIRMAN said no one, probably, had suffered more from the fall in the value of the shares than himself, and the cause of it was as much a mystery to him as to the shareholder who had raised the question. With regard to the issue of the 20,000 shares, the directors had not considered the matter; but they could not delegate their responsibility to the shareholders.

Mr. SLAUGHTER (solicitor) explained that £150,000 would have to be given on the priority shares before the ordinary shareholders got anything, whether the number of those priority shares was 130,000 or 150,000, so that it would make no difference to the ordinary shareholders, except that they would have the benefit of the money if the other 20,000 were sold.

Mr. HILTON (the secretary) reminded the meeting that the ordinary shares were all issued to the vendor. He fully explained the circumstances under which the priority shares were issued, and submitted that no one had any right to complain of the amounts which had been paid out of the profits of the company.

The resolutions were then carried with a few dissentients.

A special meeting of the holders of priority shares was then held, when, on the proposal of Admiral MAXSE, the following resolutions were carried unanimously:—

I. That Article 136 of the Articles of Association be cancelled, and that in lieu thereof the following Article be substituted.

The net profits of the company available for dividend in each year (but subject always and without prejudice to the power of first setting aside thereout any such reserve or other like fund as in the Articles of Association mentioned, and subject also to a reasonable discretion on the part of the directors to carry forward from one year to another any reasonable amount) shall until there shall have been paid or provided for from the profits of the company dividends on each of the 150,000 priority shares amounting to 20s. per share be applied as follows:—

(1) In payment of such sum or sums as may at the time of such payment be necessary to equalise the amount paid in dividends on all the priority shares for the time being issued whatever may be the respective dates of issue of such shares.

(2) In the payment or provision of further dividends *pari passu* on all the priority shares whether for the time being issued or not and so that any dividends on unissued shares for which provision may be made under this resolution shall be carried to the credit of an account to be called "Dividend Reserve Account" and shall be available only for distribution upon the unissued priority shares as and when the same shall be issued.

And when there shall thus have been paid from the profits of the company dividends amounting to 20s. per share on all the 150,000 priority shares the net profits of the company available for dividend each year shall (subject as aforesaid) be applied as follows:—

(1) Towards the payment of a dividend of 20 per cent. to the members of the company upon the amounts for the time being paid up, or credited as paid up upon their respective shares, and

(2) The residue of such profits shall be distributed as to one-twentieth part thereof among the directors by way of extra remuneration, as provided by Article 153 hereof, and as to the remaining nineteen-twentieth parts thereof among the members of the company, according to the amounts for the time being paid up or credited as paid up on their respective shares.

II. In order to give effect to the present Article the payment or allowance to Mr. H. A. Trower, upon the shares taken up by him in this company, of dividends to an amount equal to those then already declared and paid on the other shares be hereby adopted and allowed.

A vote of thanks to the Chairman closed the meeting.

### CHAMPION REEF GOLD MINING COMPANY, LIMITED.

An enthusiastic meeting.—A splendid year's results.

The sixth ordinary general meeting of the shareholders of the Champion Reef Gold Mining Company of India (Limited) was held on Thursday, at the Cannon-street Hotel, Sir CHARLES TENNANT, Bart. (Chairman of the board), presiding.

The SECRETARY (Mr. John Garland) read the notice convening the meeting.

The CHAIRMAN said: Gentlemen, the report and accounts have been in your hands for some days, and I presume you will take them as read. The past year has been a year of progress, progress all along the line. We have increased our returns of gold from 26,560 ounces to 45,708 ounces, or an increase for the year of 19,148 ounces. The value has increased from £100,521 19s. 11d. to £173,844, and the total profit was £74,366 11s. against £32,298 1s. 6d. for the previous year. Our mining progress has been equally satisfactory; for, whereas in 1893 the work done in sinking and driving was 6595 feet, in the past year the aggregate of the mining work accomplished was 10,025 feet 9 inches. Besides this, 2006 fathoms 5 feet 10 inches of stoping was done, as against 1219 fathoms 1 foot 6 inches for the previous year. The number of tons of quartz stamped during the past year was 31,604, as against 19,165 for the previous year, an increase of 12,439 tons. In addition to this, our tailings' plant, which started in February last, treated 5570 tons of tailings, from which 1243 ounces of gold were extracted. Notwithstanding the increased extraction of quartz, our reserves of ore have been augmented by 25,000 tons, and are now estimated at no less than 70,000 tons, laid out in the mine and awaiting extraction. The report explains to you that during the year we further reduced the debt incurred to pay off the debentures from £20,000 to £10,000. We have paid two interim dividends of 10 per cent. each, amounting to £40,000, and are proposing to distribute a further 15 per cent., amounting to £30,000, as the balance dividend for the past year. Thus, for the first year of the company's dividend-paying career, we have been able to distribute to the shareholders dividends amounting to 35 per cent. on the nominal capital of the company, a result which, I trust, will be satisfactory to all the shareholders. We have begun the current year well. On October 24—that is, just after the close of the company's financial year in September—we paid off the remaining £10,000 of our loan, thus entirely freeing the company from debt. We commenced the year, also, with a considerable increase in our returns as compared with the average of the past year, the figures being as follows:—October, 5603 ounces; November, 5605 ounces; December, 5618 ounces—the average of these three amounts giving us 5609 ounces, or 1852 ounces in excess of the average monthly yield for the past year. This is at the rate of 22,224 ounces, of the approximate value of £83,340, for the entire year, in excess of the result of the preceding year, and should represent a very satisfactory increase in our dividends, not including the additional quantity from the new 20 stamps. In regard to the mine I will not say much, as Mr. John Taylor is here and will speak upon that subject. I may say, however, that our mine is opening up in a remarkably successful manner. It is disclosing riches from north to south for almost its entire length, and there is every prospect of its continuation in depth. In conclusion, I would say that, in my opinion, it would be difficult to find a richer mine anywhere than the Champion Reef Gold Mine, and I look forward with great confidence to a long period of prosperity for the company. For some time past the directors have been considering whether the time has not arrived, in view of the remarkable developments of the mine, for increasing the number of stamps, and I am pleased to inform you that by the mail which arrived on Monday last, Captain Rowe, our superintendent, wrote recommending that our milling power be increased. His words are as follows:—"The mine has been rapidly and so successfully opened up that I can recommend an increase in the number of heads for milling. To do this quickly Mr. Piercey and myself, after consulting together, would recommend that an additional 10 heads be attached to each mill, bringing the milling power up to 100 heads of stamps. We would require some larger shafting from the driving pulleys, and also two new driving pulleys to fit the new shafting. Mr. Piercey will get out sketches showing the alterations, and these will be sent you for consideration by next mail." It will thus be seen that 10 heads can be added to each of the two mills erected on the mine, and that the existing engine-power is sufficient to drive them. This is very satisfactory, for it means a good saving in the cost of our new machinery, and the time for its manufacture and erection, and these extra stamps we have decided to order to-day. These additional heads should be capable of treating close upon 1000 tons of quartz per month in addition to what we are now stamping, and should very materially increase our profits. I beg now to move—"That the report and accounts to September 30, 1894, be received and adopted."

Sir JAMES M. CARMICHAEL, Bart., M.P., seconded the motion.

The CHAIRMAN said: We have received a telegram from Captain Rowe, dated January 9, which says:—

Garland's shaft. Lode 2 feet, assaying 2 ounces.—The 840 feet level north, Lode 19 inches, assaying 2 ounces.—840 feet level south, Lode 3 feet, assaying 2 ounces 5 dwts.—740 feet level north, Lode 4 feet, assaying 1 ounce 18 dwts.—740 feet level south, Lode 2 feet 6 inches, assaying 1 ounce 16 dwts.—830 feet level north, Lode 1 foot 4 inches, assaying 1 ounce 14 dwts.—level north, Lode 3 feet 6 inches, assaying 2 ounces 10 dwts.—Ritbeldale shaft, 440 south, Lode 19 inches, assaying 1 ounce 8 dwts.—Incline winze, Lode 5 feet, assaying 2 ounces 8 dwts.—340 ditto, Lode 4 feet, assaying 2 ounces 10 dwts.—Ritbeldale shaft, Lode 3 feet, assaying 2 ounces 5 dwts.—415 feet level north, Lode 19 inches, assaying 2 ounces, 20 stones average 3 feet 9 inches, assaying 1 ounce 15 dwts.; reserves increased £200 tons.

Mr. JOHN TAYLOR said that the amount of exploratory work done during the year had been greatly in excess of the previous 12 months, the development work extending to no less than 10,024 feet. This was little short of two miles of purely exploratory work, independently of the large amount of stoping—a very remarkable record—hence the handsome addition of 25,000 tons to the reserve during the 12 months. To commence the south end, Dalvell's shaft was sunk during the year 115 feet, the reef being about 2 feet wide and worth a little over 1 ounce. It was not proposed to sink the shaft any further, because a little nearer to the south end of the property they had come to the end of the pay shoot, and the distance was not great. South of Dalvell's shaft towards the boundary the 680 feet level was driven during the year 78 feet, on a lode 15 inches wide, worth 1 ounce 17 dwts., and coming to an end. The 680 feet level had been driven north for about 110 feet, the reef being about 18 inches wide, and worth about 1 ounce. Garland's shaft had been sunk 226 feet, for 180 feet of which it was in the dyke. It then came into the reef on the west side of the dyke, and for the remaining 46 feet it was sunk in a fire lode, 4 feet wide, and worth 1 ounce 14 dwts. Since the report was printed the shaft had been sunk 63 feet further, the reef being 18 inches to 2 feet wide, and worth from 2½ ounces to 4 ounces to the ton. (Applause.) The cable message told them that the reef from the bottom was now 2 feet wide, worth 2 ounces, and gave the information that new levels had been started. In the 810 feet level



North the reef was 19 inches wide, worth 2 ounces, and in the 840 level south, 3 feet wide, and worth 2½ ounces, this being the deepest point in the property. The 740 level south had been driven 38 feet, the average width of the reef being a little under 2 feet, with an average of 1½ ounce to the ton. Since the date of the report this level had been driven 132 feet, the reef continuing from 15 inches to 2 feet wide, and being worth 1½ to 2½ ounces; the cable message stated it was 2½ feet wide, worth 1 ounce 16 dwts. The 740 level north had been driven 42 feet, the reef averaging 2½ feet wide, and being worth 1 ounce 18 dwts. Since the date of the report it had been driven 157 feet, the reef averaging 1½ to 5 feet, and yielding from 1½ to 1½ ounce. The cable stated that in the end the reef was 4 feet wide, and worth 1 ounce 18 dwts. The 630 level had been driven 234 feet during the year, on a splendid lode, averaging 3½ feet wide, and worth 1 ounce 16 dwts. Near the dyke they had a reef 7 feet wide, and worth 1½ ounces. He rather welcomed than dreaded the dyke, now that they knew what they did. Since the report was written the 630 level had been driven a further distance of 158 feet, the reef being from 1½ to 5 feet wide, and worth from 1½ ounce to over 2 ounces; while the cable message said it was now 1 foot wide, and worth 1 ounce 14 dwts. The 530 level north of Garland's shaft had been driven during the year 708 feet, averaging 3½ feet in width, and 1 ounce 16 dwts. in value; while since the report they had gone 152 feet further, the reef being from 3 to 4 feet wide, with a value of from 1½ to 2½ ounces. In the forebreast the reef was 3 feet 6 inches wide, and worth 2½ ounces, so that in the 530 feet level they had had a magnificent opening from 1st October, 1893, up to the present time. The 440 level had been driven 541 feet, the average of the reef being 4 feet, of the value of 1 ounce 16 dwts. Since the date of the report the level had been driven a further 162 feet, the reef being from 3 to 5 feet wide, and the value from 1½ ounce to 2 ounces 8 dwts. The 340 level had been driven 313 feet, the reef being 18 inches wide, and worth 1 ounce 17 dwts. A dyke was met, a crosscut driven west, and another part of the lode met with; with this a level was driven south 173 feet, the reef being about 1 foot wide, and worth 1 ounce 8 dwts. Before leaving that part of the ground he would draw attention to the fact that the 530 level was driven from the boundary to the dyke, 505 feet. From the dyke to the present end it had now been driven north 902 feet, making altogether 1407 feet in a strong lode, and continuously rich in gold. (Applause.) In the 340 feet level, north of Garland's shaft, a winze and rise proved part of the lode to be still continuous, 3 feet wide, and worth about 1½ ounce. Further to the north again, an inclined winze had been sunk from the 240 feet level to the 340 feet opening up a large piece of good stoping ground, and giving good ventilation to this part of the mine. Coming now to Ribblesdale's shaft. He might state that it had been sunk during the year 115 feet. The lode had been, as a rule, small, but opening out at times, with quartz carrying 2 ounces to the ton. Before long he believed they would see an improvement here because they would meet the pay-shoot they were working in the level going south. At the bottom of the level going south the lode had been only about 4 inches wide, assaying 1 ounce; but since the date of the report it had been driven a further distance of 71 feet, and an improvement had been noticeable there recently. The reef had been from 9 inches to 1 foot wide, and worth about 1½ ounce. The 440 level south of Ribblesdale's shaft had been driven 317 feet, the lode being throughout small and unproductive. A crosscut was driven eastward 85 feet, which had proved an eastern reef, from 2 to 4 feet wide, assaying from 1½ ounce up to 1 ounce 18 dwts. The cable message stated that the reef in the end going south was 19 inches wide, and worth 1 ounce 8 dwts. The 540 feet level north at Ribblesdale's shaft was driven 227 feet, the lode being from 4 inches to 1 foot wide, assaying from ¾ ounce up to over 2 ounces. He confidently expected to hear much better accounts of this shortly, because it was approaching the "fold," about which they would have read a great deal in Captain Rowe's report, and to which was now a very short distance to the north of them. Below the 340 feet level the "fold" was doubling back upon itself. Upon the "fold" below the 340 feet level, in the neighborhood of Carmichael's shaft, a winze had been run down 107 feet, the reef being there 4 feet wide, with an average value of 1½ ounce. On the north part an inclined winze had been put down 167 feet, and there they had a reef all the way, with an average width of 7 feet, and a value of 2½ ounces. The 440 feet level had been driven below the two winzes 126 feet, the reef being 4 feet wide, and worth 2½ ounces. On this "fold" another winze had been sunk below the 440 feet level, the reef being 4 feet 6 inches wide, and worth from 1½ to 2 ounces. There were various other workings on the "fold," which could not be shown in the longitudinal section, all proving it to be wide and rich. The stopes here were 6 feet, 6 feet 6 inches, and in one case, 12 feet wide, with a value of 1½ ounce to the ton. At Rowe's shaft they had sunk during the year 196 feet, the lode averaging 2 feet wide, and 2 ounces 18 dwts. Since the report it had been sunk a further distance. At the date of the last report, on December 19, the level had been driven 120 feet, proving the reef to be 2 to 3 feet wide, with a value of from 1½ ounce to 3 ounces 13 dwts. The cable message stated that in the bottom they had a lode 3 feet wide, worth 2½ ounces. Rowe's shaft, in that portion, was opening up extremely well. (Applause.) In many other places important developments had taken place, notably above the 240 feet level, where a large extent of stoping ground was laid open. We would especially draw attention to the limited amount of stoping as compared with the explanatory work, and there could be no question that the mines had now been brought into an admirable condition for steadily yielding larger returns. The greatest praise was due to Captain Rowe for the admirable manner in which he had managed the company's affairs, and he was sure the shareholders would give him their most cordial thanks. Captain Rowe's confidence in the capacity of the mine to yield a considerably increased output, was emphasised by his recommendation to the board to send out more stamps. In this connection it would be a great satisfaction to the shareholders to know that the driving power on the mine would be fully sufficient for an additional 20 stamps, thus enabling the addition to be made at a very moderate cost, and in a much shorter time. He might, in conclusion, remind them that when speaking at an annual meeting held three years ago, when the developments at the mine were only at their commencement, he stated his firm belief that the Champion Reef Mine would take its place among the most successful of the mines on the Colar Field, and it was consequently a great pleasure to him to be able to place so entirely a satisfactory statement before them. Unquestionably they were in a position to look forward to a brilliant future, now absolutely assured to them. (Applause.)

The CHAIRMAN then put the motion for the adoption of the report and accounts, which was put and carried unanimously.

Mr. DYER intervened with questions upon one or two minor points, but several shareholders vehemently protested against what they described as a "gross waste of time of the meeting," and he resumed his seat.

On the motion of the CHAIRMAN, a dividend of 3s. per share, payable on January 26, was declared.

On the motion of Lord RIBBLESDALE, seconded by Mr. PROBYN, the retiring directors (Sir Charles Tennant and Mr. John Taylor) were re-elected.

Messrs. Cooper Brothers and Co. were re-appointed auditors, at a remuneration of 50 guineas.

Mr. WALKER said he had been very much struck by the small amount of fees paid to the directors, and he thought in such a prosperous company those who had brought it into such a flourishing state should be properly remunerated. He, therefore, proposed that the directors' fees should be raised to £1500.

Mr. GIBBS seconded the motion, which was agreed to with practical unanimity.

The CHAIRMAN thanked the shareholders, and, in doing so, said he looked forward with the greatest confidence to the results of the cyanide process as applied to the tailings as an additional means of profit.

A vote of thanks to the Chairman and directors terminated the proceedings.

## SOUTH CONDURROW MINE.

A call of 5s. 6d.—Prospects at the mine.

A general meeting of the adventurers in South Condurrow Mine was held on Thursday, at the offices of the company, 20, Great St. Helen's.—Mr. MARSHALL presided.

The SECRETARY (Mr. Charles Clark) read the notice convening the meeting.

Captain RICH read the agents' report as follows:—

Marshall's engine shaft is sunk 15¼ fathoms below the 153 fathom level, and we are expecting to intersect the flat lode in the bottom of the shaft very shortly. About 9 feet above the present bottom we cut through the engine lode (on which the shaft has been sunk), and have intersected the flat lode on the north side of it, and have opened out on this lode a few feet east; as far as yet proved it is 5 feet wide, of a very promising appearance, and is worth £29 per fathom for tin. We have also put out a short crosscut north and intersected the flat lode some 10 fathoms below the 153 fathom level. We are raising on the course of the lode above this midway level, and have passed through tin ground that will pay to stope as soon as a communication is made with the level above. When this is accomplished it will give good ventilation. This lode in this rise is worth £10 per fathom. We hope the rise referred to will soon drain the bottom of the 153 fathom level, when we shall sink to meet it. The stope on the back of the 153 west is worth £10 per fathom. The lode in the 133 east west is improving; it is letting out water freely, and is worth £29 per fathom for tin. The prospects at Marshall's are very encouraging. We are daily expecting to have the flat lode to the south of the junction in sinking the shaft. We are opening out payable ground near the deepest part, where the two lodes are in contact. The rise in the midway level will soon open out good stopes, and the 153 and west is improving.—We are, gentlemen, your obedient servants, WM. RICH, WM. THOMAS, FRANK RICH.

Captain RICH said that while no mention had been made of the eastern side of the mine they were raising a good deal of tin there, the work being done upon tribute, and so entirely without speculative risk. Taken altogether, the prospects were very much better than they were last year, but everything would have to depend upon the price of lead which, if it had kept at anything like a fair figure, would have enabled them to do without a call. He could assure the shareholders that he was doing his best to make both ends meet. The ship had as much sail as she could carry. The great object was to try and develop the mine, and at the same time to keep the costs as low as possible. During the past few months the prospects had considerably improved. The 150 was going into entirely new ground, and the last sample or two taken at the rise were very much better in value than those mentioned in the report. This might, however, be an exceptionally good sample—it was worth from £15 to £20 per fathom.

An ADVENTURER asked how long it would be before the flat lode was cut in the bottom.

Captain RICH replied that they were expecting to get it every day, but that no definite period could be fixed.

An ADVENTURER enquired when the communication with the level above would be made.

Captain RICH said this depended on the time when the ground was drained. A certain quantity of water still remained, and, until it was all drained away, it was doubtful whether they could use it.

The CHAIRMAN, in moving the adoption of the report and accounts, said:—Gentlemen, since our last meeting things have not improved, as I daresay, you have observed. We are, of course, dependent entirely on the value of the stuff we raise. We have to raise as much as we can, and having raised it, to make the most we can of it. Of course, we are entirely unable to rule the market. It is affected not only by the quantity of tin produced, but also by the price of silver, which is the currency of the country in which our chief competitors live—the Straits—and I cannot say that the prospects are in any way encouraging. Silver keeps going down and down, and no attempt is made to meet the other countries in their desire to put a fixed value upon it. We have this Eastern war going on, and likely to produce effects which nobody can gauge. If Japan take the indemnity she is morally certain to have, in gold, as she says she means to do, we are as likely to see the dollar at one shilling as at two shillings. That, of course, may produce such an acute stage of the disease that England, at last, may feel bound to join with the other countries in striving to effect a remedy. On the other hand, it may produce disastrous results which none of us can gauge. These are matters beyond our control, but it would not be wise in us to ignore them. So far as the mine is concerned, you have heard what Captain RICH has told you, and the conclusion I draw from his report is that the promise of the mine is considerably better than it has been, and is sufficiently encouraging to justify the small amount of calls that I think we are likely to ask you for. You will have observed with gratitude and satisfaction that Captain RICH has kept well within the limits which we fixed for him. A doubt was thrown upon the possibility or probability of his being able to do so when the scheme was announced, but it has been done, and I hope that all here are satisfied. I think you will also be able to draw some encouragement from the fact that for the last five months our loss is considerably less than was incurred for the preceding four months. During the latter period we lost just over £1,000, while for the five months we are now dealing with we lost £965. That is highly encouraging, and is in consequence not of any rise in the price of tin, and I am sorry to say, it is not due to any increase in produce; it must be due, therefore, to increased care on the part of the management in cutting down costs. We have a deficit, shown by the accounts, of £1292 16s. 10d. We have had the luxury of a little law in Cornwall, for which we shall have to pay something. I cannot tell what it will be, but we propose call up a sum that shall be sufficient to provide some £300, in addition to the present deficit, which personally, I think, will be sufficient. That then will be £1677, and I accordingly beg to propose: "That a call of 5s. 6d. per share be now made payable forthwith, and that on all payments made in respect of such call on or before February 15, a discount of 5 per cent. be allowed."

General SHIPLEY seconded the motion, which was carried unanimously.

The proceedings terminated with a vote of thanks to the Chairman.

**SOUTH-WEST AFRICA COMPANY.**—The *Times*' Berlin correspondent is informed on unquestionable authority that the Colonial Department of the German Foreign Office looks with great satisfaction on the steps which are being taken to increase the working capital of the South-West Africa Company (Limited). It will doubtless be remembered that rather more than two years ago this company secured valuable concessions from the Imperial Government in Namaland, and that on this account the German Foreign Office was violently attacked in the public Press for having, as it was alleged, sacrificed the interests of Germany. Since that time men of repute in Germany have joined the company, which has manifested thorough loyalty towards, and has worked in harmony with, the Imperial Government. It is, therefore, believed in Berlin that the increase in the company's working capital will not only benefit in the future those most directly concerned, but will also contribute to enhance the value of the German colonial possessions in South-West Africa.

**A WOMAN MINING EXPERT.**—Miss Nellie Cushman, of Arizona, who has the reputation of being the only woman mining expert in the world, is a Kansas girl, and began her work in examining ore at Tucson, Arizona, nine years ago, when she was a girl of 17. She first became interested in the work through her brother, a mineralogist, and her own quickness soon made her an authority in the unusual line she had adopted. The miners rely upon her advice, and since she has combined the conduct of big lodging-houses and clothing stores with her other work, she has made a good deal of money. When reverses come she takes them with the same indifference she displays to good fortune. She is described as a tall, angular dark-haired, dark-eyed girl, a rapid talker, and a great reader.

## NEW ZEALAND MIDLAND RAILWAY.

Compelled to go to arbitration in their negotiations with the Government.

The ninth ordinary general meeting of this company was held on Wednesday, at the Cannon-street Hotel, under the presidency of Mr. THOMAS SALT, M.P. (the Chairman of the company).

The SECRETARY (Mr. James R. McDonnell) having read the notice convening the meeting,

The CHAIRMAN said: Gentlemen, I have to propose that the annual report and balance-sheet be now adopted, and, in doing so, according to custom, I shall offer a few remarks as to the position of our company at the present time. The accounts are drawn up in the usual form, and have been submitted to the eminent auditors, Messrs. Cooper, I have only one remark to make upon that, and that is with regard to an item which has more than once obtained observation from shareholders at these meetings—I refer to the directors' fees. The directors propose to suspend taking their fees on the next occasion, which will be in April next, until we see our way somewhat more clearly with regard to arbitration and other matters. I believe the shareholders will consider that a matter so far satisfactory, but, at the same time, I am bound to tell you, from a very long experience, that if you wish to have your work well done the proper policy is to have on the board directors whom you can trust, and who are well paid. I say that with greater confidence because for the last 10 or 20 years the tendency of all kinds of business in this country has been to drift into the hands of Limited companies, and it is of the greatest importance that the persons who manage those companies should be men of experience, of character, and of ability, and you cannot get those things unless you are prepared to pay properly for them. With regard to our report, I will ask your attention to paragraph 6, which refers to the traffic of the company. The mileage now open is about 75 miles, and it is satisfactory that we have throughout earned our working expenses. There has been an increase in the traffic for the last year—that is the year up to June 30, 1894—as compared with the year ended June 30, 1893. There has been a gross traffic of £15,376, as against £12,765 in 1893, and the net traffic for the year 1894 is £6572, as compared with £4408 in 1893. That is satisfactory, because the line is an incomplete one, and everybody who knows anything of railway business—and many in this room know far better than I do—understands perfectly well that it is impossible to get good results from a fragment of a line. The whole reason for the existence of our line has been to create a through communication between the east and west of the South Island of New Zealand. When that communication is completed, we have every reason to hope for exceedingly good results; but, until it is completed, it is perfectly obvious that we must be content with what we can get on the small bit of unfinished railway. The most important paragraph in our report is the second. You will see that we say in that paragraph we have met with a refusal from the New Zealand Government in respect of the negotiations about which I spoke to you at our last meeting, and, therefore, we have been compelled to go to arbitration under the arbitration clause of our contract. I do not wish to take up your time for long, because you will see that it is impossible for me to put before you definitely the claims that we can make under arbitration, and our reasons for making them. I need hardly tell you that our position has been most carefully considered, and that every claim that we shall put before the arbitrators will be thoroughly substantiated by documents of the most authoritative and important character. There will be no doubt about what we have to say, or the position that we are able to hold in the face of the Government and the people of New Zealand. I should like to remind you of the position in which we ought to be at the present time. When, some years ago, an issue of debentures was made, we calculated very carefully what our prospects would be, and I, myself, and I believe, others also, held a strong expectation that by the time that debenture money was expended we should be in a position to pay off one-third of our debentures, and possibly, with good fortune, half of our debentures, with a not unreasonable prospect of clearing off in due course, and by the time the line is finished, the whole of the first issue. Looking back, I have no reason to regret or to dispute the calculations we made, reasonably, at that time. From the first to the last, I, myself, and my colleagues have been most careful to put before the authorities connected with New Zealand—both the Agent-General in this country and the Government and Prime Minister of New Zealand—that in order to carry out this railway successfully it was our expectation that we should receive the warm and constant support of the New Zealand Government. I, myself, have put it more than once before the able gentlemen who have been in this country as the representatives of New Zealand, and also directly before the Prime Minister himself, that it was absolutely essential, for an undertaking of this character to be successful, that the managers of your company and the New Zealand Government should work in thorough harmony. Beyond that, I have been careful to explain to them from time to time that any contracts that were entered into between a country 10,000 or 12,000 miles away, and men of business in this country, must of necessity, from the very essence of commercial affairs, require modification and adjustment from time to time. Circumstances were bound to alter; the requirements of the colony or our necessities were certain not to remain throughout a long period exactly the same; and, in short, I put before them what must be patent to every man of business—that when an enterprise of some difficulty, and probably to be protracted over a considerable period, is undertaken, it is a necessity that on both sides there must be what is called a give and take. (Hear, hear.) Unfortunately, and to my very serious disappointment, as well as to the disappointment of every one of us, and especially of the directors who have been personally in New Zealand, we have not been received in that spirit by the Government of New Zealand. We have been harassed and delayed, and, in fact, if I were not speaking of the Government of a British colony, but of some firm or individual in business, I should be bound to tell you that we have been outrageously cheated. But we never proposed to you, and we never proposed to ourselves, that we should go into a speculative business. We took an interest in the prospects of a great and flourishing English colony. We had good foundation for believing that the proposals we made were sound and sensible in every respect, and we should have been perfectly content with fair and generous treatment, and with such a moderate return for our outlay as prudent men may expect from a railway in a flourishing community. But we are brought, at this moment, to a curious deadlock. You know well enough that we had to deal, not only with the building of a railway, but also with the administration of a large amount of land, which was to be earned by us from the New Zealand Government, in accordance with the progress of the railway, step by step. If, in the first instance, the Government of New Zealand had directed its Agent-General—and, as I said just now, its Agents-General in this country have always been men of marked intelligence and ability—if the Government of New Zealand had entrusted its Agent-General to enter into negotiations with us as to the treatment of the land—a course which I have several times suggested—the matter might have been carried through with great advantage to the company, and with still more advantage to the colony. We could have readily devised some scheme which would have been perfectly fair to both sides, and I think I may go so far as to say that if some plan of mutual co-operation, such as I have had from time to time in my mind, had been accepted by the Government, we should have imported into the country such a stimulant to trade and industry, such an opportunity for employing the labour of the country, such a prospect of future progress and wealth, that the recent financial troubles which have visited that district of the world would hardly have been felt by the colony at all. But that, in their wisdom, the Parliament and the Government of New Zealand would not condescend to consider. Now, what has happened. In the first place, the Government of the colony was excessively anxious that we should sell land for small holdings and



small settlements. We were equally anxious, of course, that it should be so, because every holding that was sold and every settlement that was established would, of necessity, bring traffic to our railway. We are a railway company; we are not a land company; and the land was given to us in order to help in the building of the railway, and in providing the necessary funds for interest, &c., during its construction. Nobody could have been more anxious than we were; but the Government took steps, which I cannot explain in detail now, which prevented us from taking up the lands close to our railway which were most suited to settlers. We had also lands of another character; those lands were at a distance from the railway. Some of those we should sell, and have sold; but other portions of the land it was in our interest, and without doing any injury to the colony, to hold for a time in order that they might develop in value, and, when sold, lessen the expenses of the railway, both to ourselves and to the country. The Government of the country, however, in its wisdom, or for some reason which is really incomprehensible to my mind, took steps which made it so costly to hold land that we have been afraid to hold any at all. Lastly, it has caused so many delays in the construction of the railway, and created such uncertainty as to our position and prospects, that for the last four years we have scarcely been able to approach any financier in order to raise the necessary funds, which, of course, must be acquired if any undertaking of this character is to proceed. Therefore, we are somewhat in the position that, although we have acted in perfect good faith, and from the very first of the undertaking been in close communication with the New Zealand Government and its representative in this country, the present Government has acted in such a way that it has very nearly made it impossible for us either to sell land, to hold land, or to earn land. If it were not a very serious matter, it would, indeed, have reduced the affair to a most miserable comedy. But the Government has gone even further than this, and for what reason I am totally unable to understand. We are sometimes told it is for political reasons; but, as far as I can understand the present position, which, for reasons, I cannot enter into in detail now, in its earnest desire to get political support and to establish itself for ever as the benefactor of the country, it has got the matter in such a position that a very large block of valuable land is, I believe, at this moment locked up in the country, and neither we nor the Government can touch it. That is a magnificent result of introducing political necessity into commercial enterprise. If the Government had treated the matter from the first as a simple commercial undertaking—if it had put confidence in us throughout these long, difficult, and protracted negotiations—I am perfectly sure, as I said some months ago, we could have devised schemes which would have been enormously to the benefit of the colony, and which would have been safe for ourselves. Well, we now propose to deal with the matter, not by negotiation, but by arbitration. We have already selected an arbitrator of considerable experience and ability—a gentleman named Sir Bruce Burnside, who is an ex-Chief Justice of Ceylon. He is a gentleman of great knowledge and experience. Of course, it would be indiscreet and improper on my part, even if I knew, to tell you what his opinion may be, or what the position of the arbitration may be; but I assure you that no step will be wanting on our part to bring that arbitration to a successful and satisfactory issue, both for ourselves and for New Zealand. I have a strong impression—and that not without reason—that a great number of our fellow-countrymen in New Zealand will consider that this undertaking has not been dealt with fairly; but, however that may be, we shall now go before impartial arbitrators. I am going out to New Zealand myself on Friday (as you may imagine, at great personal inconvenience) in order to give evidence before the arbitrators. Our solicitor, Mr. Birchell, will accompany me, and I can assure you that no effort on my part, or on the part of any member of your board, will be wanting to consult and to protect your interests. I repeat that what the result of this arbitration may be it is impossible for me or anyone else to tell, but, still, we have great hopes that we shall obtain justice, and when we meet you here again at a future time I am not without expectation that our position may be such as, at any rate, we shall attempt to deserve. I do not know whether there is anything more that I can explain or say. You will understand the position is rather delicate, but I have endeavoured (I am afraid at too great length) to put it clearly before you. I shall be very willing to answer any questions in my power, and I now move:—"That the annual report and balance-sheet be now adopted." (Applause.)

Mr. E. BRODIE HOARE, M.P., seconded the motion, and remarked that all interested ought to feel great gratitude to the Chairman for the immense sacrifice he was making of public and business interests, to say nothing of family considerations, in going out to New Zealand. (Hear, hear.)

The motion was carried unanimously.

The retiring directors (Mr. E. Brodie Hoare and Mr. Walter Chamberlain) were re-elected, on the motion of Mr. E. H. D'AVIGDOR seconded by Mr. MAXWELL.

Messrs. Cooper Brothers and Co. were re-elected auditors.

The meeting closed with a hearty vote of thanks to the Chairman.

## MEXICAN GOLD AND SILVER RECOVERY COMPANY, LIMITED.

The company's business spreading.—Heavy expenses in Mexico.

The second ordinary general meeting of the shareholders of the Mexican Gold and Silver Recovery Company (Limited) was held yesterday, at Winchester House, the chair being occupied by Mr. R. J. PRICK, M.P.

The SECRETARY (Mr. John Morison) read the notice convening the meeting.

The CHAIRMAN, in moving the adoption of the report and accounts, reminded the shareholders that the meeting was an adjournment from one held at the offices of the company on the last day of the old year. Turning to the accounts, the shareholders would have noticed a large sum—nearly £2000—deducted from share capital for forfeited shares. This, he was sorry to say, was the principal result of the times of depression through which they were passing. The £1500 against unpaid calls had been very much reduced, and with the exception of £75, which was being paid in instalments under special circumstances, they anticipated no difficulty in recovering the whole. In the profit and loss account it would be seen that the amounts of expenditure in Mexico were rather high, owing to the absolute necessity of keeping a large staff there, and of incurring frequent travelling expenses. The accounts for the London expenses covered a period of 14 months, and the directors' fees, fixed by the Articles of Association, had been drawn to the amount of £1200. At the last annual meeting he had, without promising too much, led the shareholders to believe that the company would ultimately become highly successful in its operations, and all that he said upon that occasion was perfectly true, and the only way in which his speech was not verified by the fact was that they had not got on so fast as they had expected to do. Several causes had contributed to this, some of a general application, and others special to the company. One of these was of a permanent nature, and they had known it full well when embarking on the enterprise. Mexico was a country in which it was highly difficult to transact business. In most mining countries wages were high, and machinery comparatively cheap. These conditions were simply reversed in Mexico, and the consequence was that several crude processes prevailed, which to an extent militated against the company's interests. The withdrawal during the financial depression of last year of some of the American capital, by which all the scientific and proper mining of the country was carried on, was another disadvantage against which they had had to contend, but he was confident that this would

shortly vanish, and, even now, there were signs of a better state of affairs, the latest advice being to the effect that the capital was again coming into the country. At Sonora, where, owing to the temporary illness of one of the experts, they had been losing touch with the American connection, they were again gaining ground, and had recently been asked to tender for another very large plant. There was no doubt that by the end of the year, if the report were confirmed, they would be doing a large business there. In other parts of the country, as well, the business of the company was increasing, but unfortunately a local chemist had been experimenting with the process which, on account of its delicacy and complexity, he did not understand, with the result that it had come to be unfavourably regarded in the neighbourhood. This feeling was now, however, dying out, and, before very long, the process would be in practical use there. There were certain difficulties in the way of getting large quantities of tailings for the rapid waters were allowed to carry them off unrestrainedly, and, in cases where they remained, there was generally no water to treat them by. There were, however, quantities of tailings obtainable, and these were being subjected to experiment in order to see whether they were suited to the process. His own visit to Mexico would, he hoped, do something to enhance the reputation of the company. He had been a good deal with the President, and had been invited to sit in the House of Representatives, and to speak—circumstances which might lead to a bestowal of a greater confidence in the company. The latest advices as to the spread of business in the country were of the most favourable and satisfactory kind. They had carried out their intention of appointing additional managers so that there might be no delay in pushing the interests of the company. Numbers of gold mines had been shut up because the owners did not care to provide the sums necessary for their development, and now that a large company was being formed with the capital to work these there was an additional reason for them to look forward with hope to the future.

The CHAIRMAN briefly answered a number of questions put to him by Mr. OSBORN, and said that the decision of Mr. Justice Romer as to the patents, against which, he understood, an appeal had been lodged, would not affect their position in Mexico at all, where the law would not allow a patent which had been filed and recognised for a year to be called in question at all, except on grounds of fraud, which, in this case, did not, of course, arise.

Mr. HARRIS compared the actual position of the company with the hopes that had been held out in the prospectus, and intimated his intention of opposing the adoption of the report and accounts.

The motion was, however, put and carried with three dissentients. The CHAIRMAN announced his resolve to go shortly to Glasgow to address the shareholders there, and the proceedings terminated.

## CORRESPONDENCE.

*\* We wish it to be understood that we do not hold ourselves responsible for, and do not necessarily endorse, the opinions of correspondents. All communications must be accompanied by the names and addresses of the senders, though these need not necessarily be published.*

### NEW BELGIUM LAND AND DEVELOPMENT COMPANY.

TO THE EDITOR OF "THE MINING JOURNAL."

SIR,—At a time when public attention is being so largely drawn to that progressive country, the Transvaal Republic, owing, in great measure, to the development that must of necessity take place in the resources of this naturally-rich territory by the advent of the railways already made and to be constructed, I venture to place before you the merits of one of the least known among the Transvaal land companies formed in England. The New Belgium (Transvaal) Land and Development Company, which was established some five years since with a capital of £260,000, as an offshoot of the well-known Oceana Land Company took over from the latter what was considered to be the pick of the mineral-bearing property belonging to the Oceana Company. This consisted of a magnificent freehold estate in the Waterberg district of the Transvaal, being 60 farms, aggregating no less than 380,000 acres, or 600 square miles in one solid block, and believed to be the largest estate held by any corporation in the Transvaal, in what is practically a ring fence. The advantages of holding such a large acreage in one estate are many, and the most important is, undoubtedly, the economical manner in which it can be controlled, prospected, and cultivated. The properties of other Transvaal land companies are scattered all over the country, and the difficulty and cost of an effective management are obvious.

This property, which equals in extent the whole of the county of Hertfordshire, in England, is magnificently watered, the principal rivers being the Great Palala and Gold Rivers; and Mr. Lovelace, F.R.G.S., has reported that the permanency and volume of water contained in these rivers, their rapid fall and superb courses, make them particularly suitable for motive and irrigation purposes. The whole extent of the block, with the exception of a small portion on the east side of the Palala River, is intersected with ranges of hills and mountains. In the valleys formed by these ranges, fine permanent streams of water abound as a rule. So far back as the year 1888 prospectors washed ground out of the Gold River showing colour, and Mr. J. C. A. Henderson, a large landed proprietor in the Transvaal, reported that he had seen immense deposits of conglomerate from which presumably the gold in the river had been washed. Up to the present time, largely owing to difficulties of transport, but little has been done to develop or test the property from a mining point of view; but the completion of the Cape system of railways to Pretoria has made the property more accessible. The Chairman, at the meeting 12 months since, announced that a Bill had been passed for the construction of the extension railway from Pretoria to Nylstroom and Pietersburg, which will bring the New Belgium estate within comparatively a few miles of these necessary facilities.

As bearing on the vast conglomerate beds that are deposited on the New Belgium estate, it is a significant sign of approaching gold discoveries that the Chairman at the meeting of the company held last month, announced the discovery of two very promising reefs, one of which, at the shallow depth of only 28 feet, showed colour. Rumour has it that the appearance of these reefs is much more promising than the cautious utterances of the Chairman would lead persons to suppose; but, be this as it may, the possibilities of these reefs being discoveries of richness are great, and open out a vista of potentiality for a new gold field in these immense mineral beds that may rival the celebrated Witwatersrand district, the shares of the companies working upon the conglomerate deposits of which are in the aggregate selling in the market for quite fifty millions of pounds sterling.

The capital of the New Belgium Company consists of 242,362 ordinary shares of £1 each, of which 167,362 shares have 17s. per share paid up, and have the advantage of being quoted in the London Official Stock and Share List. The Chairman stated at the recent meeting that he did not think there would be any necessity to make a further call for a long time to come, and he held out hopes that the company might be self-supporting very shortly, whereby no call should be required.

There are surplus assets, in the way of stocks on hand, including livestock, implements, and merchandise, but taking the 380,000 acres of freehold land at the low price of 5s. per acre, the ordinary shares of the company should command a market price of about 7s. 6d. on an agricultural basis only, without estimating anything for the minerals on the estates. The mineral prospects are, however, I need scarcely say, in the event of a rich discovery of gold such as may now take place at any moment, to be of infinitely more value than the land itself, and gold reefs on any single farm might prove of more value than the whole capital of the company. Taking all the advantages of the estate into consideration, it does appear that New Belgium Company shares at their present price of about 7s. 6d. per share are unduly low, and it would not be surprising if, in the course of a few years, these shares might be selling for as many pounds as they now fetch shillings. I repeat that the New Belgium property is unique in the Transvaal from its immense mineral-bearing deposits concentrated in one huge block of country that may become of themselves one vast gold field in the future.—I am, Sir, yours, &c.,

January 9.

ORIGINAL SHAREHOLDER.

### NICKEL AND CHROME MINING IN NEW CALEDONIA.

TO THE EDITOR OF "THE MINING JOURNAL."

SIR,—Noticing the movement in the nickel and chrome market, I have great pleasure in handing you the following information, trusting you will find it worthy of a place in your Journal. New Caledonia, for some time, practically commanded the nickel market, until the keen competition set in from Canada. This has had the result of greatly diminishing the price of this article, and closing up many of the mines. Most of the mines here were kept open through the nickel company having large contracts with the small mine holders, but these contracts having expired, they are nearly all closed up, and every other man you meet in Noumea has a good mine to sell at any price he can get for it. The nickel company will be able to carry on the competition for years to come against Canada, with the enormous stock in hand, and there is but a poor chance of a resumption of work. The best deposits of nickel are now found on the west coast, which was neglected for years. Many valuable properties are opened up, and in case of a demand arising, the market could be flooded without difficulty. With few exceptions, the mines are situated close to the sea, and worked very cheaply with a wire tramway. Now is the opportunity for would-be speculators to send an agent out to New Caledonia, and they can undoubtedly suit themselves at their own figure. The extent of the nickel deposits is unknown, and rich discoveries are of daily occurrence. Mines that are easily worked simply as quarries, with easy transit and cheap labour, and one simple to treat, should in the end hold their own against Canada or elsewhere.

Chrome.—During the demand for nickel, which was so easily mined, this mineral was almost neglected in New Caledonia, but since the termination of the nickel contracts, miners are again turning their attention to it. Shipments have, however, never entirely ceased. Chrome mining has met with many ups and downs, as deposits have never been found to go down, and the output from each deposit has always been very limited, and it is very questionable whether any miner in New Caledonia would risk making a large contract with a penalty attached. The best mine ever known was called the Lucky Hit. This, however, had a very chequered career, and, finally, after producing from 1200 to 1500 tons of ore, was closed down as being worked out. A group of mines, in the same district as the Lucky Hit, were floated into a company in Sydney, but it did not exist long, and they were eventually sold by auction in Noumea, returning into the hands of Noumean owners. The south end of the island has always been the chrome district, but deposits have been worked in other parts of the island, though not with much success. Years ago a very large deposit was discovered in the north end of the island, but up to the present it has not been worked. Although this was laid before many good men in Noumea, there was some hesitation about taking it up, as it was considered to be of too low grade, with difficulties of transport.

Alluvial chrome mining has been carried on to some extent, hitherto without success. However, this branch cannot be said to have been thoroughly tried, and undoubtedly large deposits do exist. At present the export of chrome from New Caledonia does not exceed 200 tons a month, in spite of the great demand, and the efforts of the New Caledonians to meet the same, and it is very questionable whether this industry will ever assume great magnitude. Only recently, very large rich deposits of chrome are reported from New South Wales, and if the reports about them are true, chrome mining in other parts of the world will stand but a poor chance of competition. Hitherto, New South Wales chrome has been found of too low a grade, but should a demand arise for an article of 46 per cent., it will be forthcoming in unlimited quantities.

The assays from the new finds are said to be over 70 per cent. They are in a very favourable position for working, and, no doubt, this discovery will soon come before the public.—Yours faithfully,

ISLANDER.

January 10th, 1895.

### PROTECTION OF LIFE FROM CHOKE-DAMP IN COAL MINES.

TO THE EDITOR OF "THE MINING JOURNAL."

SIR,—I have an invention by which the lives of miners may be protected from the effects of the after-damp which follows an explosion in a fiery coal mine. It frequently happens in an explosion that the machinery, plant, and shaft present such a scene of wreck and destruction, that the relief of the men who are entombed in the mine is not possible for days. My invention is such that I am sure no competent judge will doubt its thorough reliability to protect the men below from suffocation while measures are being taken for their release.

One can hardly expect the mineowners voluntarily to incur the expense of adopting this, or any similar invention. And since it is solely for the protection of the men themselves, it seems to me that the Miners' Unions are the most responsible parties of all in a question of this kind. It is their duty to urge upon all employers the adoption of the best means for securing the safety of their members, to bring public opinion and legislative action into play, until employers are practically compelled to use the best means for saving life.

I would suggest to the Miners' Unions the policy of making some sacrifice in smoothing the way to the adoption of such a scheme. It would enable them to enlist public opinion very strongly in making their demand, and would carry with it immense weight when seeking legislative power for the enforcement of such a reasonable application.

I am willing to hand over to those Unions the sole patent rights for Great Britain on very moderate and reasonable terms, so that they can offer the invention to their employers free, and thus adopt it in the most economical form, and save all profits for the exclusive benefit of the workers.

The mere money value of the lives lost from after-damp during the last 30 years is many thousands of pounds, and all of those lives could have been saved by the means I am now proposing.



150, Wells street, Camberwell, S.E., January 9.

TO THE EDITOR OF "THE MINING JOURNAL."

Colonel (Count) D'AUBIGNY.

*Savanna-la-Mar, Jamaica.*

	1889	1890	1891	1892	1893	1894
Ozs. dwt.	Ozs. dwt.	Ozs. dwt.	Ozs. dwt.	Ozs. dwt.	Ozs. dwt.	Ozs. dwt.
January ..	25,595 1	25,076 15	25,205 15	84,586 9	103,374 0	149,814 0
February ..	22,458 15	37,787 5	0,079 2	86,649 9	95,252	151,870 0
March ..	77,519 0	3,788 19	52,949 1	93,244 11	110,474 0	165,312 0
April ..	27,008 16	38,596 19	55,078 18	95,452 1	118,083 0	158,745 0
May ..	3,028 7	38,836 4	34,673 1	99,426 1	115,511 0	169,773 0
June ..	80,777 13	37,149 10	56,868 1	102,252	122,907	166,162 0
July ..	31,051 2	39,456 14	54,924 10	110,279	128,069	167,953 0
August ..	50,819 14	42,863 11	59,070 4	107,312	236,199	174,977 0
September ..	30,143 10	45,485 19	65,601 5 1/2	107,851 13	129,585	176,707 0
October ..	32,14 6	45,248 17	72,793 8	112,167	139,509	173,378 0
November ..	33,721 1	46,782 18	73,393 15	106,794 1	136,400	175,369 0
December ..	39,050 11	50,352 15	80,312 11	110,748 17	146,357	182,104 0
	369,557 5	494,817 3 1/2	729,237 2 1/2	1,120,869 1	1,478,473 0	2,025,224 0

The amount of gold produced in the year 1887 was 23,145 ounces 8 dwts. Complete monthly totals were not recorded in that year.

## NOTES ON MINING IN THE WEST.

(BY OUR SPECIAL CORRESPONDENT).

THE New Year has brought very little improvement in the outlook in Cornish mining up to the present, and though we are not anxious to pose as pessimists, the most enthusiastic supporter of the industry can scarcely regard the outlook as encouraging for either investors or speculators. The fact has to be faced that deep tin mining, as carried on in Cornwall, cannot be maintained for any length of time with black tin bringing only £34 or £35 per ton, and adventurers in many of the mines will be very much inclined, unless there is a substantial improvement within a very few months, to cut their losses. The position of things is most disheartening, particularly in such a case as South Crofty. Here they have been working for years paying enormous sums in calls with the object of thoroughly prospecting the bottom of the mine. An even more vigorous policy was started a short time since, and the cost of development must have been very great, and now, when the bottom of the mine is turning out so well, the unfortunate shareholders find themselves in a condition of things which—at all events, for the time being—makes the improvement of no avail. The mine seems to be opening up remarkably well, and had they been able to obtain a fair return for the mineral raised there would certainly have been no call to pay, and possibly something on the other side of the book.

WHEAL AGAR, her near neighbour, is also said to be looking well at one or two points, especially in the 245. The Tacklingmill Company have had their new plant at work two or three weeks, and it is doing very satisfactory duty. People are expecting, as the result of the opening up of a large quantity of ground by these contractors, that some good improvements will be found; and that even before February 1st, when the special meeting will be held, there will be some tangible evidence of the enhanced value of the property.

ANOTHER mine in the same neighbourhood shows some signs of improvement. Affairs at Cook's Kitchen had come to such a pass that the closing of the mine was looked upon as a probable contingency, but improvements at one or two important points will form a powerful argument at the forthcoming meeting in favour of continuing operations. We think the probability is that Cook's Kitchen will remain a separate company for some time yet. Most people here so, unless it be a few who are more largely interested in Tinicroft.

THERE are again rumours of further curtailments of operations at some of the principal mines, and the miners themselves will very shortly be feeling the pinch acutely, unless there is some change in the metal market. At Dolcoath, on Saturday, an intimation was given to the men of further reduction in the labour costs. They were offered the alternative of the demisial of a portion of the employees, or working short time. They chose the latter, and the result will be that many of the men will have to lose a day, or perhaps two, a week. This is presumably in accordance with the policy laid down by the executive of returning only sufficient tin to pay costs, and some of the poor pitches will consequently be stopped. The reduction does not apply altogether to underground men, but proportionately to surface hands, and though not yet a very serious matter it is to be feared that if tin keeps at its present price more drastic measures will have to follow. There are also rumours in regard to Carn Brea, which mine is now being worked at a serious loss. Nothing definite as to the intentions of the executive has transpired. There are plenty of tribute pitches available, we understand, at Carn Brea, and these may afford some employment to men who may have had to remove from profitless ground.

Work in connection with the last "run" at Dolocath is progressing very fast, and it has not very seriously interfered with the general working of the mine. The intention is to put a masonry arch at the point where the run occurred, and it is generally thought by mining men that Dolocath will have to bear the cost of a good many arches of similar character, in order to keep the ground secure, and to guard against similar mishaps, which have unfortunately been too frequent for the prosperity of the mine during the last year or two.

This new West Australian company has been formed privately. We learn that the shares were over-subscribed, and that the directors went to allotment on Wednesday last. The claim acquired, we are informed, consists of a gold-mining lease for the Pilbarra Gold Fields, of about 18 acres, for 21 years, subject to the usual labour conditions, and to the annual payment of £18. The property has been reported on for the vendor by Mr. Albert F. Calvert, A.I.M.M., F.R.G.S., F.R.S.A., &c., of London, managing director of the Consolidated Gold Mines of Western Australia (Limited); Mr. Neil Galbraith, late manager Chongnan Mine; Mr. Matthews, late manager Ironclad Mine; Mr. Frederick McGregor, mining engineer; Mr. Selmond, mining engineer, and others. The following is from Mr. Calvert's report, dated December 7, 1894:—"Water: There is an abundant supply of water, more than sufficient for machinery and all other purposes, and, I may add, I am not aware of any other property in Western Australia with such a plentiful supply of water.—Timber: Any quantity of timber for machinery and firewood purposes can be obtained close at hand.—Labour: The wages at present paid are £4 per week for miners and £3 10s. per week for topmen and hammermen; but, owing to the large number of miners arriving in Western Australia from the eastern colonies every week, it is expected that these high wages will shortly be reduced.—Description: The quartz lodes, of which there are several, are strongly charged with iron, and the predominant mineral of the district may be said to be ironstone, which occurs in the form of brown hematite, with an admixture of magnetic oxide of iron. There is a well-defined reef, averaging 4 feet wide, running east and west through the whole length of the property, dipping at an angle of 40°. Sufficient work has been done and shafts sunk, which prove the immense value of this property; but, owing to the quantity of water, it will be impossible to follow the reef down until the arrival of pumping machinery. The reef has already been proved to a depth of 2 feet below the water level.—Machinery: I would recommend the directors to erect a 10 stamp battery, and also powerful pumping machinery. This would treat 100 tons per week, and I also estimate that 10 dwts. per ton will pay all working expenses.—Conclusion: In conclusion, I may say that I have made several visits to the Nicol Gold Mines since I first reported upon them early in 1891, and which report was published in the *North-West Times*, August 22, 1891, and I have still, as then, a very high opinion of this property, and I firmly believe that it will prove to be one of the most permanent mines in Western Australia.—London, December 7, 1894. (Signed) Albert F. Calvert."

**NOVA SCOTIA COAL.**—The output of coal in Nova Scotia during the year 1894, amounted to 2,055,000 tons, being an increase of 86,000 tons as compared with the previous year. The exports to the United States were 120,000 tons, against 20,000 tons in 1893. The increase was all from Cape Breton Island.

**BUTTE'S COPPER PRODUCTION.**—It is estimated that the copper production of Butte for 1896 will approximate 200,000,000 lbs.

The Union Steamship Company's Royal Mail s.s. *Tartar*, with the outward South African mails, arrived at Cape Town at 11.0 a.m. on Thursday. The *Tartar* called at Dakar, and took on a number of passengers from the Union Company's Royal Mail s.s. *Moore*, including General Goodenough, Commander-in-Chief of the Cape forces, and staff.

## COPPER.

(From Messrs. Henry R. Merton and Co.'s Circular for December, 1894).

	31st DECEMBER, 1894.			31st DECEMBER, 1891.		
	Dec. 31, 1894.	Dec. 15, 1894.	Nov. 30, 1894.	1893.	1892.	1891.
STOCKS IN ENGLAND AND FRANCE:—	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Liverpool and Swansea, Chili Bars ... ..	36,104	35,192	36,079	29,069	35,993	36,566
"          "          "          "          "          "	809	109	811	454	262	31
"          "          "          "          "          "	22	21	10	469	15	611
"          "          "          "          "          "	6,873	5,798	6,147	5,252	8,733	7,470
"          "          "          "          "          "	5,666	5,578	5,542	4,733	7,472	9,385
London (including landing) ... ..	1,288	929	1,036	2,745	3,060	2,781
Stocks of fine Copper in Havre, Rouen, Bordeaux and Dunkirk ... ..	50,784	49,276	49,645	42,745	50,745	52,644
ADVED FROM CHILI by Mail and Cable, Fine Copper ...	3,000	3,400	1,850	3,760	4,030	2,700
"          "          "          "          "          "	960	1,030	890	850	950	700
	54,664	52,676	52,295	47,195	55,745	56,044
Price of Chili Bars and G.M.B.'s per ton ... ..	£41 0 0	£40 12 8	£39 15 0	£42 15 0	£46 17 8	£46 15 0

## COMPARATIVE STATEMENT.

Month ending	Stock in England and France and Afloat there-to from Chili and Australia.	Price of G.M.B.	Arrived				Charters from Chili to Europe.	Shipments from Australia to London.	Total Supply.	* Deliveries.
			England and France.	Other European Ports.	England & France from					
					Spain and Portugal (excluding Pyrites).	Other Count's.				
Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	
31st December 1894	84,644	421 18 0	3,559	1,048	1,193	2,366	2,209	650	11,859	9,470
30th November...	82,398	39 10 0	2,103	1,895	1,535	1,235	1,250	410	8,518	9,011
31st October...	85,768	40 15 0	2,819	2,779	1,334	3,108	1,810	400	11,520	10,768
30th September...	85,634	41 10 0	1,804	3,650	909	1,572	1,100	450	9,868	10,241
31st August...	82,407	40 7 6	3,028	4,641	1,494	3,973	2,000	560	15,654	14,602
31st July...	81,525	38 2 6	3,466	3,365	1,509	1,816	1,000	1,719	9,942	9,942
30th June...	80,012	38 5 0	2,726	2,945	85	3,522	2,240	650	13,061	10,099
31st May...	87,480	39 17 6	3,778	2,759	1,976	3,023	1,650	520	12,945	12,163
30th April...	86,606	39 17 6	3,669	3,611	1,087	2,977	1,650	600	12,684	14,448
31st March...	87,897	40 15 0	2,548	3,096	3,184	1,699	1,100	500	10,575	11,349
31st February...	87,384	41 0 0	3 98	2,678	647	764	1,340	540	10,380	10,713
31st January...	87,192	41 5 0	4,921	2,879	1,477	890	1,350	500	11,247	12,060
			36,826	36,054	15,116	25,126	21,300	6,700	140,122	132,755
31st December...1893	87,295	42 18 0	3,648	4,552	1,887	852	2,700	500	13,839	15,571
30th November...	86,837	43 0 0	6,096	4,132	5,654	1,400	4,600	1,000	10,613	10,613
31st October...	86,940	42 2 6	7,097	6,275	3,999	3,082	2,200	1000	20,623	20,623
30th September...	87,964	41 17 6	7,940	3,571	1,235	621	1,700	100	10,987	16,144
31st August...	87,361	41 12 6	4,272	2,880	1,335	645	1,100	400	16,040	12,462
30th July...	80,463	41 12 6	4,236	2,412	614	2,607	2,400	400	12,669	12,411
30th June...	89,968	43 10 0	1,514	2,310	1,958	2,548	1,850	550	11,230	11,126
31st May...	89,951	43 8 6	3,179	957	4,291	1,271	1,760	425	8,928	11,071
30th April...	82,194	43 10 0	2,521	965	709	1,084	1,600	810	7,459	10,626
31st March...	86,271	45 5 0	1,312	667	1,877	5,988	620	600	8,417	10,400
31st February...	87,482	40 12 6	1,821	632	1,170	2,781	400	410	9,884	10,945
31st January...	88,567	45 2 6	3,566	425	1,452	4,489	1,000	700	11,772	9,011
			47,552	29,662	15,970	29,389	21,720	6,656	151,153	169,601
31st December...1892	85,745	46 17 6	3,235	542	3,665	3,068	2,100	300	12,228	9,991
30th November...	85,408	47 17 6	4,822	823	4,901	1,725	1,600	700	5,660	10,640
31st October...	86,078	45 12 6	752	850	768	2,042	1,650	500	7,436	8,666
30th September...	85,842	44 8 6	1,018	535	1,618	4,215	1,750	400	7,687	8,028
31st August...	85,715	44 7 6	1,087	384	966	2,583	1,800	400	9,029	8,028
30th July...	86,738	44 17 6	2,993	590	2,146	3,774	2,400	600	12,043	9,875
30th June...	86,504	44 17 8	2,509	414	2,245	4,745	1,600	500	12,315	9,674
31st May...	83,965	46 7 8	1,341	668	2,188	1,215	2,180	280	8,068	8,521
30th April...	83,828	45 12 6	1,588	1,284	9,422	2,968	1,200	100	10,242	10,728
31st March...	84,311	46 5 0	2,340	1,667	2,012	2,013	1,750	200	10,002	12,471
29th February...	86,781	44 5 0	2,282	495	1,724	1,477	2,000	200	8,058	8,731
31st January...	87,462	44 12 6	2,109	893	710	1,525	305	708	6,498	6,498

\* Including Chilean and North American for all Europe.

**TIN.**

(From Messrs. A. Strauss and Co.'s Circular for December, 1894).

	30th Nov. 1894.	31st Dec. 1894.	31st Dec. 1893.	31st Dec. 1892.
Straits and Australian spot .....	Tons. 9,485	Tons. 8,983	Tons. 4,392	Tons. 2,778
Ditto ditto landing .....	499	1,189	617	1,348
Straits, afloat .....	2,425	4,225	3,580	1,905
Australian, afloat .....	583	711	909	957
Banca, on Warrants. ....	12,996	15,110	9,498	6,984
Billiton, spot .....	1,410	1,040	335	841
Ditto afloat. ....	1,751	1,687	862	316
Straits, spot in Holland .....	750	1,180	1,661	1,100
	840	810	584	159
	17,739	19,827	12,915	9,400
Total afloat for United States .....	1,425	1,400	750	1,550
Estimated stock in America .....	2,950	3,060	1,815	3,815
Total .....	22,114	24,337	14,810	14,765
Prices of Straits and Australian.....	£62 15 0	£61 0 0	£74 0 0	£91 5 0
Deliveries during the month in London.....	1,585	1,263	1,460	1,057
Ditto ditto Holland.....	877	505	573	608
	2,462	1,828	2,033	1,745

Shipments during the month from Straits to London ... .. 3,500 Tons

[illegible]

Barca in Trading Company's hands and afloat, 6262 tons.

Pairs: Bialta and Australian, prot	...	...	£1 0 0	three months	...	£1 5 0
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Blanco	62 10 0	Milton	61 15 0
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## LATEST FROM THE MINES.

## CABLEGRAMS AND TELEGRAMS.

**ALASKA MEXICAN.**—A cablegram from Alaska reports the clean-up for the month of December as follows:—"Period since last return, 31 days; bullion shipped, \$15,651; ore milled, 6038 tons; sulphurets treated, 136 tons; of bullion there came from sulphurets, \$4168; working expenses for period, \$11,569."

**ARGENTINE CONCESSIONS.**—The directors have received a cablegram from Mr. F. B. Deering, confirming his previous cablegrams as to the favourable strikes made in the Carolina Mine.

**BARRETT GOLD.**—Written advices to 14th December report all going well at mine and mill. Rautenbach's reef looking better than for months past. The opening up of other known reefs and deposits now being proceeded with. November gold, 581 ounces, has been received and realised in London, £2042. 1150 tons ore treated by cyanide yielded 512 ounces 15 dwts. A cablegram, dated 5th January, says:—"December gold yield, 600 ounces."

**BAYLEY'S REWARD CLAIM.**—The following cablegram, dated 3rd inst., has been received by the London office from Melbourne:—"Week's run, 168 ounces, 80 tons. We think it will be safe to estimate this an exceptional case. Have telegraphed to manager: 'Do you see your way to better returns? Will telegraph again.'"

**BLOCK B LANGLAAGTE.**—Production for December by cable:—"Mill. Stamps running, 70; ore crushed, 7385 tons of 2000 lbs.; gold retorted, 2275 ounces.—Tailings, cyanide process. Tons treated, 6020 tons of 2000 lbs.; gold recovered, 901 ounces.—Concentrates, cyanide process. Tons treated, 132 tons of 2000 lbs.; gold recovered, 280 ounces; total gold recovered, 3456 ounces."

**BONNIE DUNDEE.**—The directors have received the following cablegram from the managing director in Charters Towers:—"Have cut a formation 5 feet wide carrying a reef of good quality 2 feet thick. Have not yet reached the footwall. I estimate the quality of the reef at 2 ounces of gold per ton, and believe it to be the Victory reef. The vein dips north east at an angle of 20°."

**BRILLIANT EXTENDED.**—Brisbane, 4th January: 210 tons 109 ounces.

**BROKEN HILL PROPRIETARY.**—For the week ended the 3rd inst. 10,274 tons of ore were treated, yielding 858 tons of lead, containing 226,016 ounces silver; also 863 tons treated by amalgamating and leaching plants, producing 10,107 ounces silver. The cablegram further states that 4 inches of rain have fallen at Broken Hill, and that the water supply in the tanks and those of the Broken Hill Water Company will be sufficient to furnish a regular supply for two years and a-half.

**BUFFELSDOORN.**—Result of last month's crushing yielded 5174 ounces of gold.

**CAYLLOMA SILVER.**—December production: 380,000 ounces fine in export ores, 11,000 ounces fine in bullion.

**CHAMP D'OR DEEP LEVEL.**—The crushing for November was 10622 ounces from the battery and 1378 ounces from cyanide, totalling 1200 ounces.

**CHIAPAS.**—Cable: "During December the mill ran 25 days 1150 tons of ore were crushed, yielding 58 tons of concentrates. Drought has necessitated the use of stamp belts on roller mill during December. Commence to stamp on 3rd January. Belts arrived safely here yesterday."

**CITY AND SUBURBAN.**—Last month's crushing yielded 10,484 ounces, against 10,262 ounces for November.

**CROWN REEF.**—Copy cablegram received from Johannesburg: Results for December: Yield in smelted gold from 120 stamp mill 6116 ounces. Yield in smelted gold from 120 stamp, cyanide works treating tailings and concentrates produced by the mill 3087 ounces. Yield in smelted gold from old cyanide works treating accumulated stock of tailings and slimes 1240 ounces. Total, 10,433 ounces.

**CROWN REEF.**—Results for December: Yield in smelted gold from 120 stamp mill, 6116 ounces; yield in smelted gold from 120 stamp cyanide works, treating tailings and concentrates produced by the mill, 3087 ounces; yield in smelted gold from old cyanide works, treating accumulated stock of tailings and slimes, 1240 ounces. Total 10,443 ounces, against 10,853 ounces for November.

**DE LAMAR.**—The following is the cable return for the month of December:—"Crushed during the month 3060 tons. Bullion produced in the mill \$64,770, estimated value of shipping ore \$13,320, miscellaneous revenue \$895, total produce \$78,985, total expenses \$38,965, estimated profit for the month \$40,020, or, at \$490 to £ sterling, £8167."

**DON PEDRO.**—The following is copy of a cable received from the manager at the mine:—"Produce for month of December 3050 octavas, equal to 351 ounces. Adit completed. Shaft sunk 7 fathoms. Shaftmen fixing new bottom lift to reach the 75 fathom crosscut. New drive commenced south of G0 east."

**DURBAN-ROODEPOORT.**—Results for December: Quartz milled, 6750 tons, 70 stamps, 26 days, 3241 ounces; tailings treated 7015 tons, 1707 ounces. Total, 4948 ounces, against 4792 ounces for November.

**EL CALLAO.**—Messrs. Baring Brothers and Co. (Limited) have received the following telegram from "El Callao" Mining Company:—"376 to 400 ounces of gold produced by 'El Callao' Mine for the past month, and 1551 to 1575 ounces by the Colombia Mine."

**ELKHORN.**—The following is the cable return for the month of December:—"Mill worked 30 days and crushed 1074 tons. Bullion produced in the mill, \$22,355; 117 tons of smelting ore sold, \$8930; total produce, \$31,291; total expenses, \$21,656; estimated profit for the month, \$9635; or at \$485 to £ sterling, £1986."

**ELKHORN.**—Bullion produced in the mill for the week ended January 5, 8200 ounces.

**EMERALD (REWARD).**—Since the registration of the company on 28th September, 1894, the directors have received the following telegrams as regards produce:—"17th October, 76 tons gave 211 ounces; 6th November, 52 tons gave 179 ounces; 21st November, 35 tons gave 98 ounces; 27th November, 32 tons gave 116 ounces; 5th December, 232 ounces; 1st January, 255 ounces. Total, 1091 ounces, which at £3 19s. 6d. per ounce is equal to over £4300."

**FERRERA.**—Copy of cablegram received from Johannesburg: Results for December. Tons crushed, 4270; bar gold extracted, 4922 ounces; concentrates caught, 170 tons; assay value of concentrates, 51 ounces fine gold per ton. Cyanide works. Bullion produced from tailings 1400 ounces.

**GELDENHUIS ESTATE AND GOLD.**—A cablegram has been received from the head office at Johannesburg, stating the

following results for last month (December):—"Crushed 9907 tons; obtained from mill 3796 ounces of gold; obtained from tailings by cyanide, 2637 ounces of gold; total, 6433 ounces of gold."

**GOLCONDA.**—The secretary informs us that he has been advised from Cus that the company has acquired an additional 7 acres known as Golconda No. 2, on the underlie of the reef, thus increasing the property from 18 to 25 acres.

**GREAT COOLGARDIE.**—The directors have received the following cablegram from Mr. Wm. Milford, M.E., one of the London directors who was sent out by the board to inspect the property:—"Struck a rich body of ore Lindsay's adjacent location to the south. The lode can be traced Great Coolgardie Mine. Caused great excitement."

**GREAT DUNDAS.**—A cablegram from West Australia states that the transfer of this property to the company has been duly registered by the warden of the Dundas gold fields.

**GLENCAIRN.**—The London agents announce receipt of the following cable:—"Production for December, 2571 ounces from 5244 tons battery; 2013 ounces from 6045 tons, cyanide. Profit, £6000. 50 stamps 27 days. Shortfall through stoppage of battery connecting new stamps. Mill working splendidly."

**GLENCAIRN MAIN REEF.**—The London agents announce the receipt of the following cablegram:—"Acting on satisfactory report from the manager the board has decided to erect an additional 30 stamps immediately."

**GRASKOP.**—Copy of cable received from the manager at Graskop, January 8:—"Crushed 400 tons, yielded 48 ounces."

**GINSBERG.**—Result of December crushing: 1084 tons crushed, producing 618 ounces of gold.

**GELDENHUIS MAIN REEF.**—Result of December crushing: Milled crushed 3400 tons, yielding 1192 ounces of gold; cyanide treated 2350 tons, yielding 526 ounces of gold; total, 1718; profit for the month, £1965.

**HARRITVILLE.**—The directors have received a telegram from Mr. T. G. Davey, giving the result of last month's crushing as follows:—"300 tons—109 ounces."

**HAURAKI.**—Cable. The tributers working on the new reef have just obtained a large quantity of specimen stone. The company have taken possession of the block and are getting good quality ore. The level has been driven 25 feet. We have struck a small body of good payable ore in the crosscut.

**HARQUAHALA.**—The following is the cable estimated return for the month of December:—"Mill worked 25 days, crushed during the month 2387 tons. Estimated gross value of gold produced \$21,000, miscellaneous revenue \$500, total revenue \$21,500, estimated total expenses \$12,900, estimated profit for the month \$8600 (at \$490 to £ sterling, £1755).

**HENRY NOURSE.**—Crushing for December: 2250 tons produced 1754 ounces; cyanide works, 1650 tons produced 781 ounces. Total, 2535 ounces.

**KING SOLOMON'S.**—The following information has been received by cable:—"Estimate of ore in sight, 10,000 tons; will average 3 ounces per ton."

**JUBILEE.**—Last month's crushings of 2959 tons yielded 1623 ounces of gold; tailings, 456 ounces of gold. The November yield was 2261 ounces. At the extraordinary general meeting of shareholders, held in Pietermaritzburg on the 4th inst., the agreement entered into between the directors of this company and the New Grahamstown Gold Mining Company (Limited) was confirmed.

**JUMPERS (THE).**—Result for December: A cablegram has been received from the head office at Johannesburg, as follows:—"Crushed 8794 tons, obtained 3707 ounces of gold, and concentrates equal to 498 ounces of gold, total 4205 ounces of gold, profit £4750."

**KELLY'S QUEEN BLOCK.**—Messrs. Burditt, Munro, and Co., 16, Cornhill, E.C., have received the following cablegram, dated Brisbane, 4th inst.:—"Kelly's Queen Block crushed 246 tons for 506 ounces."

**KABONGA.**—The following cablegram has been received from the manager at the mine:—"The water is now out of the shaft; engaged in clearing out and retimbering bottom level. 900 feet cleared."

**LANGLAAGTE ESTATE AND GOLD.**—Production for December by cable:—"Mill. Stamps running, 160; ore crushed, 21,153 tons of 2000 lbs.; gold retorted, 7767 ounces.—Tailings, cyanide process. Tons treated, 19,800 tons of 2000 lbs.; gold recovered, 3042 ounces.—Concentrates, cyanide process. Tons treated, 320 tons of 2000 lbs.; gold recovered, 922 ounces; total gold recovered, 11,731 ounces."

**LANGLAAGTE ROYAL.**—Production for December, 3191 ounces.

**LISBON-BERLYN.**—Results for December: Tailings treated by cyanide, 290 tons of 2000 lbs.; recovered, 201 ounces; milled, 760 tons of 2000 lbs.; recovered, 94 ounces; total recovered, 295 ounces. In the month of December the cyanide plant was in course of removal to the site of the new mill, where it is expected to resume work about the 15th inst. The accounts for the small quantity of ore treated in December.

**LONDON AND WESTERN AUSTRALIAN EXPLORATION.**—The directors have received news by cable from Mr. W. R. Wilson that fairly fresh water has been struck in the shafts on the Great Fingall reefs property. At the time the cable was dispatched water was flowing in at the rate of 1500 gallons a day, and was increasing. In a costeeing trenchon, the property a further vein 9 feet wide has been struck averaging about 1 ounce to the ton.

**MAY CONSOLIDATED.**—The following cable message, dated Johannesburg January 4, has been received:—"The yield of gold during the past month (December) was 2308 ounces from 6550 tons crushed. Mill running 30 days; also cyanide 260 ounces from 1655 tons."

**MESQUITAL DEL ORO.**—The following cablegram, giving the result of the December mill run, has been received from the mine:—"50 stamps ran 774 hours (32 days 6 hours); quantity of ore crushed, 3602 tons; bullion produced at clean-up, 956 ounces; value about £3295. Have also remitted copper bar, value about £60."

**METROPOLITAN GOLD.**—During December crushed 4200 tons; obtained 1535 ounces of gold; 640 ounces also recovered from tailings. Total, 2175 ounces.

**MEYER AND CHARLTON.**—Crushed during December, 3922 tons; obtained 1885 ounces of gold, 546 ounces also recovered from tailings. Total, 2431 ounces. Estimated profit, £318.

**MONTANA.**—By cablegram from the mine the directors are informed that the total output for December was 6480 tons of ore which contained gold, 2600 ounces; and silver, 22,210 ounces. The estimated realisable value of the same is \$64,500.

**MOODIES.**—Returns for December: Claims rented or leased from the company, 256; number of tons crushed by claimholders, 640; yield of gold from ditto, 378 ounces.

**MOSMAN.**—The directors have received the following cablegram from the manager at Charters Towers:—"Have crushed

170 tons of quartz from the North Australian shaft for 205 ounces of gold and 125 tons from the Wyndham shaft for 95 ounces. A crushing of 57 tons from the Rainbow Lease (worked on tribute by the company) has yielded 254 ounces of gold. The mill is stopped for repairs." The approximate value of the North Australian and Wyndham gold is ...

**MOUNT MORGAN (Queensland).**—Results for the month of December: Tons chlorinated, 6862; gold returned, 9289 ounces.

**MYSORE.**—A telegram from the mine gives the return of gold for the month of December as follows:—"5450 tons of quartz produced 4169 ounces of gold, 4500 tons of tailings produced 720 ounces of gold." Total production for the month 4889 ounces of gold. Two experimental trials have been made with the cyanide process, 1004 tons of tailings having been treated, and gold obtained of an estimated value of £614.

**MYSORE REEFS.**—The following telegram from the mine, dated 5th inst., gives last month's return of gold as follows:—"43 tons quartz crushed has yielded 51 ounces retorted gold." Another telegram states:—"325. Width of lode 1 foot 8 inches, assaying 2 ounces 5 dwts. per ton. In the bottom of winze width of lode 2 feet, assaying 4 ounces 2 dwts. per ton."

**NEW CHIMES.**—Result of last month's crushings:—2637 ounces of gold, against 2531 ounces for November.

**NEW JAGERSFONTEIN.**—Statement of the results of work done and estimated profit for the month of December, viz.:—Diamonds estimated at £33,250. Less expenses as per cable, £16,000; decrease of blue 43,000 loads at 1s. 6d., £3225 = £19,225; profit for the month, £14,025.

**NEW KLEINFONTEIN.**—Result of last month's crushings—1740 ounces of gold; from tailings, 812 ounces; 5000 tons developed. The yield for November was 2447 ounces.

**NEW QUEEN.**—The following cablegram has been received, dated Charters Towers, January 5:—"Started crushing to-day."

**NIGEL.**—Result of crushing for December: Battery, 2614 ounces; cyanide, 1656 ounces. Total, 4270 ounces, against 4256 ounces for November.

**NEW CLEWER ESTATE AND GOLD.**—Results for December, from mill working 22 days: Crushed 1368 tons, yielding 591 ounces of gold. From cyanide works: Treated 1540 tons, yielding 1584 ounces of gold. Total yield, 2175 ounces of gold. Total value, £4942. The labour question is giving much trouble.

**NEW HERIOT.**—Last month's crushing 5494 ounces, against 4583 ounces for November.

**NEW PRIMROSE GOLD.**—The London agents announce receipt of the following cable:—"Production for December 7490 ounces, profit £10,384; 100 stamps 27 days. The new stamps are working well."

**NEW ST. AUGUSTINE.**—A cablegram from the mine, dated January 9, states:—"300 lodes, one-third limestone, yielded 27 carats."

**OLD IMPERIAL.**—Brisbane, 4th January: 360 tons 273 ounces.

**ORION.**—The returns for November show that during the month the company crushed 4682 tons of ore, yielding 1266 ounces of gold; the tailings treated amounted to 2538 tons, yielding 1790 ounces. Total output, 3056 ounces. Net profit for month, £5582. A dividend and bonus amounting to 25 per cent. have been declared. The profits include £662 on investments.

**PAARL CENTRAL.**—A cablegram has been received from the head office at Johannesburg stating the following results for last month:—"Mill. Crushed 4423 tons, yielding 1187 ounces of gold.—Cyanide Works. Treated 2730 tons, yielding 280 ounces of gold; total, 1467 ounces of gold; total value, £5050. Labour is scarce."

**PALMAREJO.**—Milling return for the month of December: 1100 tons worked, producing \$31,500; expenses for the month, \$30,500. Mill stopped, overhauling and repairing machinery.

**RANDFONTEIN ESTATES.**—Production for December by cable:—"Mill. Stamps running, 60; ore crushed, 6839 tons of 2000 lbs.; gold retorted, 2944 ounces.—Tailings, cyanide process. Tons treated, 5110 tons of 2000 lbs.; gold recovered, 562 ounces.—Concentrates, cyanide process. Tons treated, 50 tons of 2000 lbs.; gold recovered, 85 ounces; total gold recovered, 3591 ounces."

**ROODEPOORT UNITED MAIN REEF.**—Crushing for December: 5738 tons produced 2481 ounces; cyanide works produced 1417 ounces; 3898 ounces. 50 stamps working. Profit for month, £5170.

**ROBINSON.**—Production for December: By cable. "Mill. 70 stamps at work. 9509 tons of ore crushed yielded in smelted gold 9022 ounces. From concentrates (by chlorination) 1810 ounces. From tailings (cyanide process) 2059 ounces. From own ore 12,891 ounces. From concentrates bought (by chlorination) 3617 ounces. Total gold recovered 16,508 ounces."

**SALISBURY.**—Last month's crushing yielded 1850 ounces, against 1750 ounces for November.

**STANHOPE.**—Last month's crushing yielded 1350 ounces, against 1360 ounces for November.

**TRANSVAAL GOLD.**—A cablegram has been received as follows:—"Ore mined, 1525 tons; ore treated, 2075 tons, yielding 1800 ounces; tailings treated, 650 ounces; total, 2360 ounces. Estimated value of bullion, £6725."

**TRANSVAAL COAL TRUST.**—The following is copy of a cablegram received from the Transvaal Coal Trust Company, Limited, at Johannesburg, with reference to that company's operations for the month of December:—"Output 22,700 tons, profit £4200. The production has fallen off on account of the holidays."

**UNITED MATABELE CLAIMS.**—Home Rule Reef: Mr. Jefferson Clark reports that this reef has been struck in the tunnel at a depth of 185 feet, the reef being 10 inches wide and carrying visible go d.

**UNITED MEXICAN.**—San Cayetano: Gross returns for week ending December 29, \$680; expenses, \$1170; loss, \$490.—El Cubo: Gross returns for week ending December 29, \$6014; expenses, \$5580; profit, \$434. The manager added the word "holiday" as an explanation of the low returns.

**VAN RYN.**—Result of 27 days working, 50 stamps, 2162 ounces, 420 tons; cyanide works, 875 ounces. The yield for November was 2891 ounces.

**WEST AUSTRALIAN GOLD CONCESSIONS (Talisman Mine).**—The directors of the West Australian Gold Concessions (Limited) have received a telegram from their representative whom they had instructed to have a trial crushing made on a scale fully representing the quality of the ore now on bank, to the following effect:—"That 170 lbs. of the Talisman ore had been crushed at Bayley's mill, showing 30 to 35 ounces per ton. The Talisman being about 50 miles from Coolgardie, a larger quantity of ore could not be readily conveyed."

**VICTORIA GOLD MINING ASSOCIATION.**—The fortnightly crushing has been cabled as follows:—"355 tons crushed yielded 538 ounces gold."

**WEMMER.**—The directors are in receipt of cable advising result of work done during December, viz.:—"5145 tons crushed, yielding 4090 ounces of gold; 40 stamps working 30 days; and from cyanide plant 4125 tons treated yielding 876 ounces gold."

**WORCESTER EXPLORATION.**—Last month's crushings yielded 2713 ounces of gold, against 2891 ounces for November.



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 ARE BUYERS OF  
 LEAD ASHES, SULPHATE OF LEAD, LEAD SLAGS,  
 ANTIMONIAL LEAD, COPPER MATTE, TIN ASHES, &c.  
 and DROSS or ORES containing  
 TIN, COPPER, LEAD, AND ANTIMONY.

**HENRY WIGGIN & CO. (Limited),**  
 NICKEL AND COBALT REFINERS,  
 MAKERS OF BEST RED LEAD FOR FLINT GLASS  
 MANUFACTURERS,  
 BIRMINGHAM.

**LAMBERT'S WHARFAGE CO.,**  
 PRINCE OF WALES DOCK, SWANSEA.  
 Ores, Mattes, Regulus, and Bars received and prepared for market.  
 Copper, Lead, Tin, Spelter, and Pig Iron Received, Weighed, and  
 Sampled, and Warrants issued against same.  
 N.B.—Warrants are on accepted list of London Metal Exchange.  
 Regular lines of steamers from America, Europe, &c.  
 Consign goods to Lambert's Cranes, Prince of Wales Dock, Swansea.

### PACIFIC MINING AGENCY AND TRUST COMPANY.

A Corporation organised under the Laws of the State of California  
 CAPITAL STOCK, £50,000.  
 BOARD.

IRWIN C. STUMP (Chairman) Manager of the Estate of the late  
 U.S. Senator Hearst.  
 IRVING M. SCOTT, Manager Union Iron Works.  
 JACOB H. NEFF, President California Miners' Association.  
 P. N. LILIENTHAL, Manager Anglo-California Bank (Limited).  
 W. F. GOAD, Vice-President, Wells, Fargo, and Co.  
 D. M. BURNS, Capitalist.  
 R. C. CHAMBERS, Manager Ontario Mine, Utah.  
 WILLIAM C. RALSTON, Secretary (Secretary California Miners  
 Association).  
 BANKERS—The ANGLO-CALIFORNIAN BANK (Limited).  
 HEAD OFFICE—MILLS BUILDING, SAN FRANCISCO, CAL.

THIS COMPANY sells Mines, Mining Claims, Ditch Properties,  
 and Water Rights ON COMMISSION, and will act as Agent and  
 Broker for the Sale and Purchase of such Properties.  
 It is intended to conduct the Purchase and Sale of Mining Claims,  
 Ditch Properties, and Water Rights on the same basis as a real estate  
 transaction.

The Company is prohibited by its Articles of Incorporation from  
 buying or selling on its own behalf, or except upon commission, or  
 as agent or factor for others.

The buyer pays no fees whatever, and there is no incentive to  
 advance the price beyond the original figures at which the price and  
 commission have been agreed upon with the seller.

It is not intended only to negotiate the sale of an entire property but  
 interests in such may be sold or money obtained for development work.  
 This Company especially solicits the business of making reports or  
 examinations for non-resident mine owners on any of their mines  
 in the United States, and obtaining special information as to their  
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Telegraphic and Cablegraphic Address: "TUTWORK, LONDON."  
 Codes used: "A.B.C.," "Moreing's," and "Universal."

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LONDON: JANUARY 12, 1895.

### THE METALLURGICAL TRADES IN 1894.

IF the iron and steel trades are to be considered fortunate  
 in having no history to record, the absence of any note-  
 worthy incident during the past year ought to be accepted  
 as a favourable indication of the state of the industry. But so  
 far is this from being the case, that all branches of the metal-  
 lurgical trades have lain under a persistent cloud of depression,  
 relieved only by an occasional gleam of hope, and the industry  
 has been unable, at any moment, to raise itself above the dull  
 level of inactivity. The causes of this unsatisfactory situation  
 must be sought for in nearly all the factors that make for the  
 prosperity, or otherwise, of the national industry. The weakness  
 lies chiefly, of course, in the demoralised state of foreign  
 finance. The largest consumers of metallurgical goods  
 are mainly those countries in which the silver currency  
 is a serious drawback to the seller, and represents  
 a cutting of profit upon transactions that have done much to  
 lessen the trade with South America and other markets during  
 the past year. If there were any prospect of the silver crisis  
 lasting indefinitely there would be plenty of ground for looking  
 upon the future of trade with serious forebodings; but it is an  
 encouraging feature of the past year that the position of the  
 white metal has almost imperceptibly strengthened, in conse-  
 quence, probably, of the enormous increase that has taken place

in the production of gold, and of the hope that is generally enter-  
 tained of an early lessened disparity in the relative values of the  
 two metals. It is hardly possible that the price of silver will  
 ever rise much above the figure now prevailing; but the opening  
 up of rich gold fields, and the trebling of production, will do a  
 great deal towards bringing down the value of the precious  
 metal to a more workable level. Before gold can be cheapened,  
 however, it is necessary that it should be put into circulation,  
 and at the present moment there is a very pronounced feeling,  
 against putting money into new undertakings. The tendency  
 is, therefore, towards a movement in a "vicious circle," from  
 which we shall be unable to extricate ourselves except by some  
 bold policy of industrial enterprise.

The carrying out of such a policy would seem to be favoured  
 by the improved position of the South American markets, that  
 have been recovering steadily from the crisis of the past few  
 years, and seem disposed now to enter upon a new period of  
 buying. As these markets continue to develop their natural  
 resources, they tend naturally to enfranchise themselves from  
 the inconveniences of the metal problem, and a country's wealth  
 is to be measured by the value of the native products, and not  
 by the character of the currency in use. It is evident that when  
 the Argentine Republic and Brazil can send away natural pro-  
 duce of an equivalent value to the manufactures imported, the  
 relations between Europe and South America will be very  
 greatly improved, if they are not placed in a position  
 of permanent activity. To this extent, a certain satisfaction  
 may be expressed at the absence of any undue expansion of ex-  
 ports to South America during the past year. It shows that  
 the Republics, while carrying on a steady work of internal deve-  
 lopment, are not disposed to increase their obligations towards  
 foreign manufacturers and capitalists until they are in a position  
 to meet them; and, considering the amount of enterprise now  
 being displayed in the establishment of new home industries, it  
 may be reasonably hoped that the year now opening may see a  
 quiet and continuous expansion of trade with those important  
 markets. If some element of promise is observable in South  
 America, the future is by no means so encouraging in our  
 colonial possessions. The business done with Australia is far  
 from fulfilling the promise of a twelvemonth ago, when it was  
 expected that the stagnation brought about by the financial  
 crisis would be followed by an active and profitable buying. In  
 Australia, as elsewhere, a cloud of depression hangs over nearly  
 every branch of industry, and capitalists see no means of invest-  
 ing their money to profitable account. Up to within the past  
 few years the progress has been much too rapid to be lasting,  
 and some time must elapse before the country can again push  
 on the work of industrial development. One factor that must  
 be taken into account is the declining value of natural products,  
 such as wheat and wool, that have to enter more and more into  
 competition with growing producers like Argentina. Upon the  
 other hand, Australia possesses many resources that would  
 become a means of inexhaustible wealth if sufficient capital and  
 enterprise could be found to make use of them, and the newly-  
 discovered gold fields will, no doubt, in the coming year do much  
 to add vitality to the country's purchasing power. It is to be  
 hoped that the auriferous fields in Western Australia will do as  
 much for the island-continent as the Transvaal mines have  
 for South Africa. The Cape has, indeed, been a very satisfac-  
 tory customer during the past year, and is likely to be still more  
 so in the coming twelvemonth, as the opening up of the  
 British South Africa Company's new territory will, no doubt  
 involve the purchase of a great deal of railway and other  
 material. Such an improvement is sadly needed, as there has  
 been a serious falling-off in railroad material, and this is the in-  
 dispensable basis of our foreign trade. The home industry can  
 not prosper if restricted to the markets already existing, and it  
 is necessary that new countries should be continually opened  
 up to provide our mills and forges with an abundance of work.

On turning to India, a retrospect of the business done leads  
 to the conviction that a vast deal of necessary work has been  
 left undone. The Indian Government has always shown itself  
 particularly unmindful of the industrial interests of this country  
 and is more anxious to make out an economical Budget, than to  
 spend money in the laying down of railways and the carrying  
 out of other works that may aid in the progress of the Indian  
 Empire. The gold, coal, and other resources of the country  
 would undergo a very rapid development if the Government  
 could only be induced to abandon its parsimonious policy, and  
 lay down a network of railways that should be worthy of the  
 enormous wealth of the country it would serve. It is difficult  
 to see what risk would be involved in this expenditure of money  
 as an increase of trade between England and India would in-  
 evitably have its due effect upon the Budget. It would, per-  
 haps, be necessary to wait some years before the investment  
 began to bear fruit, and the Indian Government does not care  
 to wait beyond the end of the financial year. Nor have our  
 commercial relations with Canada been so satisfactory as  
 to allow of a pleasurable retrospect over the past  
 twelvemonth. Most descriptions of iron and steel  
 have been imported into the Dominion in smaller quantities,  
 and this is, no doubt, due, as in other markets, to the scarcity of  
 money for investment. It is, indeed, singular that a country of  
 such magnificent resources as Canada should be wanting in the  
 wherewithal to carry on their development, for there is probably  
 no other of our possessions that offers so much guarantee of  
 satisfactory investment; and the Government of the Dominion is  
 anxious to place every facility in the way of English capitalists  
 who may wish to participate in the country's wealth. If plenty  
 of money could be forthcoming for investment in Canada, and in  
 the other British colonies, one of the most serious obstacles to  
 trade improvement would be overcome. The colonies cannot  
 buy British manufactures unless they are compensated in some  
 way by the co-operation of British capital in the development of  
 their resources. This natural wealth is so far in excess of the  
 native means of turning it to account that the aid of outside  
 capital is imperatively needed, and, until this is forth-  
 coming, there is not much probability of the British metallurgical  
 trades benefiting to any great extent from an expansion of  
 trade with the colonies.



The discussion that has taken place lately as to the growing competition of foreign iron and steel makers has done much to deepen the pessimistic feeling which seems inherent in the British character. A steady decline in British iron and steel exports, in face of the increasing trade done by the foreign manufacturers, would certainly seem to afford some ground for the belief that the Germans and Belgians are ousting the British from neutral markets, and when it is seen that foreign iron and steel are being imported into England in greater quantities, there may be some excuse for looking upon the situation with alarm. At the beginning of the year it seemed possible that the British industry was entering upon a period of recovery, and the hope of improvement was revived by the appearance of one or two of the Board of Trade Returns that were of a distinctly more favourable character. Unfortunately, the exports of iron and steel during the first eleven months of the year have undergone a heavy decline, and were valued at £17,168,005—a reduction on the corresponding period of 1893 of £2,016,506. This, too, has taken place in spite of the fact that the values of iron and steel have remained practically unchanged. At the same time, the exports of iron and steel from Belgium and Germany have been steadily increasing all through the year, though doubtless the figures would present a much less imposing total if the value, instead of the tonnage, were registered. The most significant feature of these exports is the amount of material that is being sent to England, it is said for consumption. The Belgian and German makers are accepting foreign orders at almost any price, in the hope that they will be able to make up for the deficiency by insisting upon higher values from home consumers. But it is one thing to formulate a policy, and quite another to carry it out successfully. It cannot be denied that the Continental firms have reduced the economy of manufacture to a point below that attained in this country, where the higher wages and shorter hours prevent manufacturers from achieving more economical results than they do at present. With an increased capacity of production the German and Belgian firms require more work to keep their plants fully employed, and, as they expect to make a profit upon the home business, they accept orders in England at a price below the cost of manufacture. The work brings them in no remuneration, but it affords them a footing in markets from which they have hitherto been excluded, and improves their standing as a manufacturing nation. They look to benefit from this enterprise in the future when they have got together a large foreign connection and an improved state of trade will allow of their asking higher prices. In the meantime, they are increasing their facilities for transport, and the Belgian firms are thus able to send rails and other material to Canada and South America at lower rates than is possible to the British manufacturer. This policy would, no doubt, meet with a certain measure of success, if it were possible to carry it out in its entirety. But, unfortunately for the Continental firms, they have established it upon a very weak basis. To compensate them for the loss upon foreign trade, they ask for higher prices from the home consumers, under the impression that, as iron and steel imports are prohibited by the tariff, the home buyers will be compelled to accept the terms of the sellers. During the past few months the consumers have resisted this policy to their utmost, and refused to place orders, except for pressing requirements. At the same time, the iron rollers have failed in their attempts to reconstitute their syndicate, and, as the foreign business is insufficient to keep the mills employed, makers are competing severely for the orders given out by the home consumers, with the result that prices for all descriptions of iron and steel are rapidly falling. The quotations upon the home market are consequently approximating very closely those for the foreign business, and leave only the barest margin of profit to the manufacturer. As the position of trade is still tending downwards, it is probable that the Continental firms will be compelled before long to put a check upon their ardour for foreign business, unless they are prepared to bring utter ruin upon their industry. The possibilities of foreign competition are, however, still serious enough to occasion some concern to British manufacturers; and, though the outlook may be by no means so black as has been represented, it is advisable that makers should be prepared to vigorously resist the invasion of foreign-made material.

As to the future of the iron and steel trades, it is not easy to point out indications of an immediate improvement. The tariff reform in the United States has done little to stimulate the purchase of British goods, and the amount of material going to America is decreasing every year. Since manufacturers in the States have begun to lay down machinery for cheaper production our makers have been losing their hold upon the market, and it is not likely that it will ever attain to the importance of a few years ago. In turning to the East, the outlook is distinctly more satisfactory. The war between China and Japan will, no doubt, exercise a great civilising influence upon the Celestial Empire, and the next few years may see an active adoption of Western ideas in China. A recovery of buying in this direction would react at once upon the metallurgical industry generally, and it apparently only needs this one impulse to inaugurate a period of steady activity.

The pig iron trade has passed through a year of great depression, and the output has been steadily declining. This country has long since had to give way to the United States as the largest producer of crude metal, and now it is threatened for the second place by Germany, who has increased its production of pig iron during the past year very considerably. To a certain extent, the heavy increase in the output of crude metal in Germany is due to the fact that producers have not had to contend against labour troubles, and this is a very serious impediment to the progress of the metallurgical industry in this country. The other metals have been practically stationary during the past year, with the exception of copper, which has steadily declined, and good merchantable copper, which, at the beginning of the year, was quoted £41 6s. 3d., lately fell to

£38 5s. The value has now advanced to within 2s. 6d. of the figure quoted at the commencement of 1894, and the prospects of the metal are distinctly more satisfactory. On the whole, there is plenty of ground for anticipating that the present year will see a slight recovery in all branches of the metal industries, and it is probable that an increase of enterprise in foreign undertakings will lead the way to a steady improvement in trade.

## NOTES AND COMMENTS.

As we were the first to draw public attention to the extraordinary gold wealth of Western Australia, so can we pat ourselves upon the back for being the earliest to bring into recognition the vast mineral resources of British Columbia. We are gratified to notice that our efforts have not been fruitless, for we receive almost daily evidence that British Guiana is invoking increased attention. The following paragraph has been appearing this week in the leading London and provincial Press, and we quote it as evidence of what we have said: "The knowledge of the presence of gold in British Guiana is rapidly becoming diffused outside of the circle in which it has hitherto been kept, and greater attention is now being paid to this colony, as its wonderful natural advantages for the prosecution of the gold industry become made known. It now appears that this colony, distant only 14 days from England, in addition to gold ore of the highest quality, possesses all the other natural features necessary for the most profitable working thereof in such measure as has never before been found, in conjunction, in any other gold producing country. Goods have been delivered at a mine landing on one of the great rivers which intersect the country at a total freight cost of only £3 per ton from England. Water there is almost a superfluity, affording power in places, thus doing the work of crushing as well as washing out the gold. Timber for mining, and all purposes, is growing in inexhaustible quantity on the spot. No attempt has been made hitherto to make these features known outside, though the colonists are stated to have all their spare capital in the industry; on the contrary, deterrent influences of all kinds appear to have been exercised, which are being exploded one by one. The climate of the interior has been proved by Englishmen to be healthy. Government returns show that the gold exported, which began with 250 ounces in 1884, has now reached a total value of £2,282,045 5s. 7d. These facts prove that a very valuable field for the employment of capital has been found. We hear the Government of British Guiana purposes holding an exhibition of the colony's gold in London shortly."

From all accounts there is a splendid opportunity existing for the Government of Ceylon to provide good mining laws to assist the prosecution of the industry. Practically, no laws exist, and the mineowners are free to work their employees as they choose, without running any risk of liability. The island, as is well-known, is famous for its plumbago and gem riches, but the working for these is attended with great danger to the miner. It is true that a law has been passed authorising the Government to appoint persons to see to the safety of the mines, but as no definite rules have been drawn up, this practically will have little or no effect. Consequently, every mineowner is allowed to do much as he pleases, and as these gentlemen are not remarkable for the possession of philanthropic and charitable sentiments, and as it is their object to obtain as much wealth as possible with an economical outlay of capital, they little mind jeopardising the lives of unfortunate miners. It doesn't reflect much credit upon an enlightened Government that such a state of things exist, especially as it could derive great advantage from a well-conducted and prosperous industry, and, therefore, we hope it will early bestir itself to introduce reforms. It is not as if it were asked to meet by legislation some great defect in the constitution of the island. It is asked merely to attend for a moment to a very simple matter, but one which has in itself potentialities for incalculable advantage.

A GENERAL survey of the commercial progress for 1894 is pregnant with suggestiveness. Years before, the cry that England was, to some extent, losing her hold upon the markets of civilised countries turned the attention of the nation inwards upon its means and conditions of production, but rarely has foreign competition aroused so much anxiety at home as during recent months. An additional impulse was given to enquiry by a depression ruling in certain of the English metal trades, and not appreciably alleviated by the downfall of McKinleyism. So long as other civilised countries are hedged around with the provisions of a prohibitive protection, England must make up her mind to look elsewhere for markets, and, fortunately, there does not seem at present much prospect of her having to look in vain. Some of the markets she has lost within the last few years will never be regained, but others will be found to supply their places—new countries on the eve of development—and there need, consequently, be little real anxiety so long as the best is made of the advantages which offer.

THE *San Francisco News Letter* is endeavouring to do what we, ourselves, have been doing for some years past, to wit—to give some profitable hints to investors. We are afraid that by this time investors are getting weary of the advice thus philanthropically tendered, and that a spirit of revolt is thereby being engendered amongst them. If so, we can but philosophically reflect that it is the old story of human weakness over again. We look around and fail to see any profitable results of our instruction, yet in spite of it, we are determined to do it over and over again. This time, however, we will content ourselves with quoting the words of wisdom from our *San Francisco* contemporary:—"When approached by anyone with a mine for sale it is well, in the first place, to ascertain the character of the vendor from some reliable source. If, in the

past, he has been connected with a shady operation, it would be wise to drop him and proposition at once. Again, it is just as well to remember that nine men out of ten could not tell the truth about a mine to save their souls from perdition, and about the same percentage of alleged experts know a mine when they see it. Tinkers, tailors, and candlestick-makers, together with cast-offs of all trades and professions, have graduated in their mind's eye as full-fledged mining experts in the far West, and a smattering of technical terms picked up from association with the Simon Pure articles, enables them to deceive people at a distance with their plausible stories. They invariably take hold of some worked-out mine with a history, and offer it at a high figure on the possibilities of finding ore in the future.

BEFORE this expectation is realised (which is seldom, in their case) the green horns are bled to build a mill, and the promoter reaps another golden harvest from the machinery-makers. The only way to rout these plunderers is to insist upon them paying for an examination by some reliable expert of good repute for honesty. These are scarce, and in this city the active men of the profession whose reports are worthy of dependence can be counted upon the fingers of one hand. Each man has his own speciality, and an authority on quartz veins is not always expert on gravels, and vice-versa. Upon a report from one of these men an investor is safe to act, and the advice given is always well worth a liberal fee. Cheap men are expensive in the long run, particularly in the mining business, and volunteer reports, signed with the inevitable home-made 'M.E.', are never trustworthy. If intending mine purchasers will only follow this advice, they need not fear a serious loss, for the more reliable the man selected, the more cautious he will be found in his statements. No one knows better than the true expert the vicissitudes of mining operations, and he seldom ventures into the realms of prophecy. It is his place to deal with facts as they are presented to his eye, and the possibilities, while always limited in their scope, will be framed on a sound basis."

THE following story, which, it is needless to say, originates from America, is worthy of publication, without any comment:—A miner, named John Quincy Adams, was prospecting somewhere in the mountains in New Mexico. While wearily trudging along one hot day through the gulch, where the sun had a good chance at his back, he suddenly smelled smoke. The phenomenon struck him as odd, and he glanced quickly in every direction to ascertain the origin of the smoke; but, seeing nothing, he resumed his journey. A moment later the smell returned stronger than ever, and the breeze just then blowing in the direction in which he was walking, a light wreath of vapour curled about his ears, and gave him to understand that his haversack was on fire. Like all miners, he carried a large lens for the purpose of examining the specimens and the sand in his pan, and the truth flashed upon him. For want of room he had hung the glass on the outside, and the rays of the sun had been concentrated on his haversack, which was thus set on fire. As among its contents were 12 or 15 lbs. of powder, he lost no time in dropping the dangerous burden, and getting away as far as possible before it exploded. The haversack fell between two huge stones, and cuddled down out of sight. Adams soon reached a safe distance, and disconsolately watched the smoke arising from his sole worldly possessions. Suddenly there was a deafening report. The ground trembled, and Adams dodged behind a huge stone to escape the fragments of flying rock. Rising, he went to the spot to gather what he could find, when his eyes almost started out of his head at seeing the quartz that had been blown up fairly glittering with gold. His powder had done better on its own account than it had ever done on his, and had literally blown open a gold mine for his benefit. He was made a rich man in an instant, and named his mine the "Nick o' Time."

THE Board of Trade Returns for last month are of more than ordinary interest, inasmuch as they comprise the statistics of our foreign trade for the year 1894. For the past month the import return, given at £33,070,480, is somewhat disappointing, being £3,678,240 less than the total returned for the same month in 1893. Food stuffs returned at £11,030,361, and the raw materials for textile manufacturers given at £2,779,874, show respective reductions of £1,518,976 and £1,452,376. The raw materials for sundry manufactures, miscellaneous articles, and metals give also decreases of £314,164, of £666,885, and of £137,000 on respective totals amounting to £2,779,874 and £1,157,808 and £1,450,770. For the year ended December 31 the estimated total value of the imports into the United Kingdom is given at £408,505,718, being an increase of £3,817,540 over the return for the year 1893, or at the rate of 10 per cent. Under the items of animals for food and raw materials for textile manufactures there are increases of £2,747,092 and £2,615,988 on respective totals of £9,098,796 and £70,623,485. The raw materials for sundry industries and general manufactures, given at the respective totals of £43,091,143 and £68,958,531, present also increases of £2,102,337 and £3,104,235. Metals show a fall of £1,566,894 on a total of £19,062,612.

For the month the exports of British and Irish produce and manufactures are returned at the declared value of £17,500,585, and show a net increase of £231,511. The substantial increases are those of £357,415 and £114,845 under the headings of articles manufactured and metallic manufactures on respective export values of £2,482,039 and £2,233,452. There are also small increases in the returns of coal, machinery, and horses exported. As regards yarns and cotton manufactures, there is a fall of £234,100 on a return of £7,783,218. For the year 1894 the exports amounted to the declared value of £216,194,239, and as against a value of £218,094,865 so given for the year 1893 present a comparative decrease of £1,900,626. Looking at the several headings of the export return, the only substantial increase is that of £2,780,728 in the item of raw materials or coal, which is returned at the total of £19,816,100. Machinery presents an increase of £347,579 on a total of £14,265,122. On the other hand, metals,



returned at a total of £28,045,527, and general manufactures at £28,267,710, present respective decreases of £2,791,648 and £962,430. Apparel, also, and cotton manufactures are reduced to the extent of £807,784 and £464,000 in returns of £8,740,732 and £96,090,032. The re-exports of foreign and colonial merchandise are returned for the month at the value of £4,827,861, and for the whole year at £57,966,484, and show in the first instance an increase of £592,438, but in the second a net decrease of £1,076,921.

## THE MINING MARKET.

FRIDAY EVENING.

Rand shares duller.—Westralians largely dealt in.—A big Rand deal.—Miscellaneous firmer.

THE main feature of the markets for the past week has been the reaction in South African shares, which have been very weak. Affairs for a time shook off their weakness in a determined manner on Monday, and there were numerous instances of further improvement. Business was again largely increased in volume, not only in the South African Market, but also among Westralians, where extended operations were conducted. Diamond shares were the subject of a small relapse, following naturally enough upon the recent rise. For Tuesday so favourable a description does not apply. Selling was the rule in the Rand market, and relapses—though to no serious extent—were general. Lands and Diamonds participated freely in this state of things, both groups being distinctly easier. For some time after the opening of the markets, Miscellaneous shares were undeniably affected by the prevailing dullness, but a rally later in the day showed that no inconsiderable amount of public favour is concentrated in this department. The reaction in the Rand market became more pronounced on Wednesday. Realisations proceeded, and prices on that account moved downward in a body. As is frequently the case, the markets hardened slightly before the finish, but according to the general opinion, the declination will continue until the close of this account. Land and Diamond shares participated wholly in the weaker tone, and the losses were general in these departments. Westralians and Miscellaneous shares continued firm. Some wide differences of tone manifested themselves in the South African Market on Thursday. At the opening prices were fairly firm; but later on they grew easier, only to harden again towards the finish. Quotations consequently fluctuated a good deal. Land shares were rather better in tone. West Australians were largely dealt in, though there was but little change in prices. At the close affairs are in such a condition that it is impossible to look ahead with any prospect of prophetic certainty.

### British Mines.

There is absolutely nothing to chronicle of the British mines during the past week. All have been, or have wished to be, sellers, and in that sentence the whole situation is depicted. The meeting of Polberru adventurers was held to-day on the mine, and on going to press we receive a telegram from Mr. J. B. Reynolds saying that the meeting was unanimous and enthusiastic. We hope to publish a full report next week.—Risen: Wheal Bassett, 2s. 6d.—Fallen: Carn Brea, 10s.; Dolcoath, £4 10s.; East Pool, 5s.; Killfirth, 5s.; South Crofty, 2s. 6d.; Tincroft, £1; West Kitty, 10s.; Wheal Grenville, £1.

### South African Shares.

Rand shares were wonderfully active on Monday, rises being general. Meyer and Charlton gained  $\frac{1}{2}$  at 7 $\frac{1}{2}$ , Heriots were up  $\frac{1}{2}$  to 8 $\frac{1}{2}$ , and Nigel also gained  $\frac{1}{2}$  to 5 $\frac{1}{2}$ . Rises of  $\frac{1}{2}$  were registered in Knight's, Henry Nourse, Kleinfontein, and New Chimes. Bantjes were up  $\frac{1}{2}$  to 2 $\frac{1}{2}$ , George Goch at 2 $\frac{1}{2}$ , Kimberley-Rodepoort at 1 $\frac{1}{2}$ , Modderfontein at 9 $\frac{1}{2}$ , Orion at 3 $\frac{1}{2}$ , and Van Ryn at 5 $\frac{1}{2}$  being also  $\frac{1}{2}$  higher. Goldenhuis Estate were up  $\frac{1}{2}$  to 6 $\frac{1}{2}$ , Buffelsdoorn advanced to 3 $\frac{1}{2}$ , and Jumpers to 6 $\frac{1}{2}$ . On the other hand Crown Reef fell  $\frac{1}{2}$  to 9 $\frac{1}{2}$ , and City and Suburban dropped  $\frac{1}{2}$  to 16 $\frac{1}{2}$ . In Langlaagte Estate, New Primrose, and New Rietfontein a fall of  $\frac{1}{2}$  occurred. Randfontein vacillated a good deal and eventually closed at 22s. 9d. sellers. Land shares were busy enough, Chartered at one time being quoted at 48s., and dropping to 46s. 3d. Diamonds, after the recent gains, were rather easier. Tuesday brought an unfortunate arrestment to the operations of the Rand Market, and set-backs were the rule, though in but few cases were they at all considerable. Goldenhuis Estate, George Goch, Knight, Langlaagte Royal, Modderfontein, Nigel, Rand Mines, Robinson, Steyn Estate, United Rodepoort, and Aurora were each about  $\frac{1}{2}$  lower, while the number of  $\frac{1}{2}$  down was much larger—tending thus to show that it was the prevailing feeling of the market, and no weakness inherent in the shares that was responsible for the decline. Against these losses Crown had a sharp recovery to 9 $\frac{1}{2}$ , and Cities hardened to 16 $\frac{1}{2}$ . Gold Fields Deep rose  $\frac{1}{2}$  to 4 $\frac{1}{2}$ . Goldenhuis Southern were also firm, and closed at 17s. Chartered were dull and closed at 46s. 3d., while Bechs relapsed to 20s. 3d. Diamonds were similarly out of sorts, De Beers falling to 19 $\frac{1}{2}$  and Jagers to 17 $\frac{1}{2}$ . An easier tone of business continued to prevail in the South African department on Wednesday. Realisations with their consequent set-backs, were the rule. Rand Mines, Modders, and Simmers each lost  $\frac{1}{2}$ , closing at 32 $\frac{1}{2}$ , 9 $\frac{1}{2}$ , and 12 $\frac{1}{2}$ , while Van Ryn receded  $\frac{1}{2}$  to 4 $\frac{1}{2}$ . Consolidated Deep, Goldenhuis Deep, and Gold Fields Deep all lost  $\frac{1}{2}$ ; Heriots and Jubilee  $\frac{1}{2}$ ; Jumpers, Knight's, and Rodepoort Deep  $\frac{1}{2}$ . Buffelsdoorn was sold at 3 $\frac{1}{2}$ , but closed 3 $\frac{1}{2}$ . Champ d'Or Deep finished 1s. 6d. down at 24s. 6d. East Rands fell back to 51s. 9d. Langlaagte Royal receded to 4 $\frac{1}{2}$ , but afterwards hardened to 4 $\frac{1}{2}$ . Crown Deep were enquired for and improved to 1 $\frac{1}{2}$ . Land shares were lower, Chartered falling to 45s. and Bechs to 28s. Among Diamonds De Beers went down to 19 $\frac{1}{2}$  and Jagers to 17 $\frac{1}{2}$ . The tone in the Rand department changed a good deal during Thursday, but closed firm, mainly, perhaps, in consequence of the announcement of another satisfactory Rand yield. Bantjes advanced from 2 $\frac{1}{2}$  to 2 $\frac{1}{2}$ . Langlaagte Royal gained  $\frac{1}{2}$  to 4 $\frac{1}{2}$ . Kleinfonteins improved to 4 $\frac{1}{2}$ . Robinsons, East Rands, and Heriots hardened on extensive buying, Rand Mines have rallied to 21 $\frac{1}{2}$ , Randfontains to 22s. 3d., Modders to 9 $\frac{1}{2}$ , Simmers to 12 $\frac{1}{2}$ , and Gold Fields Deep to 4 $\frac{1}{2}$ . There were also rises in Afrikanders, Consolidated Deeps, Goldenhuis Deep and Estate, Rietfontein, and Luipaard's Vlei, and Primroses and Glencairns were firmer. Buffelsdoorn receded to 3 $\frac{1}{2}$ , but recovered to 3 $\frac{1}{2}$  at the finish. Lands were stronger, Chartered rising at one time to 47s. 3d., but closing lower. De Beers were quoted at 19 $\frac{1}{2}$  and Jagers, rallied to 17 $\frac{1}{2}$ .

South Africans were dull during the greater part of the day, but towards the close they were a trifle firmer. Champ d'Or especially were flat. Lands were fairly active, Chartered going up to 47s. 6d. Diamonds were unchanged throughout.

Risen: Afrikander, 1s. 3d.; Agnes Block, 1s.; Bantjes, 7s. 6d.; Barretts, 2s. 6d.; Bechuanaalands, 3s.; Champ d'Or, 5s.; Chartered, 1s. 6d.; Clewer Estate, 1s. 3d.; East Rand, 3s. 9d.; Exploration, 5s.; Ferreira, 2s. 6d.; Forbes, 6d.; Frank Johnson,

6d.; Goldenhuis East, 2s. 6d.; Goldenhuis, South, 1s.; George Goch, 5s.; Ginsberg, 6d.; Gold Fields Deep, 8s. 9d.; Grahamstown, 6d.; Grigoland, 6d.; Heriot, 10s.; Joe's Reef, 6d.; Johannesburg Investment, 1s. 3d.; Johannesburg Water Works, 1s.; Jubilee, 2s. 6d.; Kleinfontein, 8s. 9d.; Klerksdorp, 1s.; Langlaagte, 2s. 6d.; Luipaards, 6d.; Meyer and Charlton, 5s.; Mozambique, 2s. 6d.; New Virginia, 9d.; Nigel, 2s. 6d.; Oceana Development, 1s. 3d.; Oceana Land, 5s.; Pigg's Peak, 6d.; Rand Mines, 5s.; Rietfontein, 5s.; Robinson, 2s. 6d.; Sheba, 1s.; Spitzkop, 6d.; St. Augustine, 2s.; Sutherland Reef, 6d.; Transvaal Coal, 2s. 6d.; Transvaal Estates, 2s. 6d.; Transvaal Land, 6d.; United Ivy Reef, 1s.; United Langlaagte, 2s. 6d.; United Pioneer, 1s.; Wemmer, 12s. 6d.—Fall: African Consolidated, 9d.; Aurora, 2s. 6d.; Aurora West, 6d.; Balkis Eersterling, 1s.; Balkis Land, 6d.; Buffels, 3s. 9d.; Champ d'Or Deep, 1s.; City and Suburban, 7s. 6d.; Crown Reef, 7s. 6d.; De Beers, 5s.; Durban, 5s.; Eastleigh, 1s. 3d.; Exploring, 2s. 6d.; Goldenhuis Main Reef, 1s. 6d.; Glencairn, 2s. 6d.; Gold Fields of Mashonaland, 1s. 3d.; Harmony, 1s. 6d.; Henry Nourse, 2s. 6d.; Lisbons, 3d.; Main Reef, 6d.; Metropolitan, 2s. 6d.; Modder, 2s. 6d.; New Belgium, 1s.; New Chimes, 2s. 6d.; New Louis d'Or, 1s.; New Jagers, 7s. 6d.; Otto's, 3d.; Princess, 1s. 3d.; Randfontein, 1s.; Rodepoort Deep, 11s. 3d.; Salisbury, 2s. 6d.; Simmer, 17s. 6d.; South African Trust and Finance, 1s.; Southern Land, 1s.; Van Ryn, 2s. 6d.; Willoughby, 1s. 3d.; Worcester, 5s.

### Miscellaneous Shares.

On Monday, Westralian shares were active, among the most prominent being Hampton Lands, Abbotts, Golconda's, Kinsellas, and Bayley's. White Feathers, Cashmans, and Boulders were rather lower. Elsewhere, in the Miscellaneous section Frontino improved 1-32 to 1 $\frac{1}{2}$ , and Callao Bis 7 $\frac{1}{2}$  to 2s. 7 $\frac{1}{2}$ . De Lamar were 6d. higher at 27s. 6d. West Argentine were rather harder. Burma Ruby dropped 1s. 3d. to 7s. 3d., and Pestarena 9d. to 7s., falls of 3d. or 6d. being shown in several other shares. Copiapo advanced  $\frac{1}{2}$  to 1 $\frac{1}{2}$ , and Rio Tinto  $\frac{1}{2}$  to 15 $\frac{1}{2}$ ; but Cape Copper lost  $\frac{1}{2}$  to 1 $\frac{1}{2}$ . In the Miscellaneous department on Tuesday, Westralians were fairly active, Bayley's Reward were slightly better, and West Australian Explorations rose to 4 $\frac{1}{2}$ . Elsewhere Victory gained 1s. 9d., to 9s. 3d., and Mount Morgan  $\frac{1}{2}$ , to 2 $\frac{1}{2}$ . British Broken Hill and Wentworth Ordinary each being a little better. Bonnie Dundee lost 6d. of the recent rise, Broken Hill Proprietary fell 6d., to 35s. 6d., and Day Dawn Block at 11s. were also 6d. down. The Miscellaneous department was the one lively spot in the market on Wednesday. Small declines occurred in Hampton Lands and Plains, Exploration and Associated Gold Fields, and West Mallinas were the subject of much attention, the former closing firm. Among Indians, Mysore Gold lost  $\frac{1}{2}$  to 2 $\frac{1}{2}$ , and Mysore Reefs 6d. to 6s. Ooregum, on the other hand, gained  $\frac{1}{2}$  to 3 $\frac{1}{2}$ , and Champion Reef rose similarly 4 $\frac{1}{2}$ . Elsewhere Aladdin were not so firm at 1 $\frac{1}{2}$ , and Wentworth Priority dropped 9d. to 15s. 3d., while Mills' Day Dawn, Kaboonga, and Victory were also on the list of easier prices. Large deals were made in West Australian shares on Thursday, an especially good enquiry setting in for Gold Fields, White Feathers, Exploration, and Austins. Prices, however, were not much higher. Miscellaneous shares were rather weaker.

During to-day the Miscellaneous Market went off a bit, and prices have not been so firm, nor business so active. Bonnie Dundee were quoted at 13s. 6d. The feature of West Australians has been Bayley's Reward, which fluctuated a good deal, and were the object of much interest.

Risen: Australian Broken Hill, 6d.; Bonnie Dundee, 1s.; Brilliant Block, 3s. 9d.; British Broken Hill, 1s.; Broken Hill Proprietary, 1s. 3d.; Callao Bis, 9d.; Champion Reef, 1s. 3d.; Copiapo, 2s. 6d.; Cumberland, 4s. 6d.; De Lamar, 2s. 6d.; Don Pedro, 1s.; El Callao, 2s. 6d.; Frontino, 1s. 3d.; Glenrocks, 9d.; Golden Feather, 6d.; Golden Leaf, 6d.; Holcombs, 3d.; Kangarilla, 1s. 6d.; La Plata, 3d.; La Yesca, 3d.; Mosmans, 3d.; Mount Morgan, 1s. 3d.; New Queen, 1s. 3d.; Orita, 6d.; Rio Tinto, 1s. 3d.; Victory, 1s.; Yarraconda, 6d. Fallen: Argentine Cons., 6d.; Bakers, 2s. 6d.; Brilliante, 1s. 6d.; Burmah Ruby, 6d.; Cape Copper, 1s. 3d.; Carrington, 3d.; Eaglehawk, 3d.; Elkhorn, 1s. 6d.; Harquahala, 6d.; Idaho, 3d.; Jay Hawk, 6d.; Kaboonga, 3d.; Kapanga, 1s.; Mills' Day Dawn, 2s. 6d.; Montana, 6d.; Mysore, 2s. 6d.; Mysore West, 6d.; New Guston, 1s. 3d.; Niore Reefs, 3d.; Palmarejo, 3d.; Pestarena, 2s.; Tolima A, 5s.; West Argentine, 6d.

### Australians.

Risen: Abbotts, 2s. 6d.; Kinsella, 1s. 3d.; London and West Australian, 2s. 6d.; West Malina, 3d.—Bayley's, 1s. 6d.; Blacketts, 2s. 6d.; Great Boulder, 1s.; Hampton Land, 1s. 3d.; Hampton Plains, 2s. 6d.; West African Gold Fields, 1s. 3d.

APPANTOO GOLD MINING COMPANY (LIMITED).—The adjourned second ordinary general meeting of this company was held yesterday at Winchester House.—Mr. A. G. Kitching, J.P. (Chairman), who presided, in moving the adoption of the report and accounts, said he was disappointed with results attained. Good progress, however, had been made in the development of the mine. The Thomson tunnel had been driven 183 feet west in Treasury Hill, and east on the opposite side of the gully a tunnel had been driven 140 feet; both tunnels yielded good ore, which had been sent to the mill. Cawston's shaft was down between 160 and 170 feet, and at 102 feet a crosscut had been driven which cut a rich lode at 70 feet. The 20 head stamp battery was being moved from Gie Appantoo to Prestea, where they expected to have 44 head at work next month. He regretted that they would be obliged to call up the last 6d. per share. The payment of claims to two shareholders of the old company had necessitated this step. He had every hope of their receiving larger returns from the mine and being able to work it at a profit, as every effort had been made to develop the property which was now thoroughly opened out.—Mr. Hae Williams seconded the motion.—Captain Wyatt, in reply to Mr. Fergusson, Mr. James, and other shareholders, said that the average width of the reef was 10 feet, and assayed from 15 dwts. to 1 $\frac{1}{2}$  ounce.—The Chairman then put the motion, which was carried unanimously. The retiring directors, Messrs. J. Labouchere and Hae Williams, and the auditor, Mr. Leonard B. Warrington, A.C.A., were re-elected.—Lieut.-Colonel Champion proposed and Mr. Hae Williams seconded, a hearty vote of thanks to the Chairman, which was unanimously accorded, and the meeting closed.

BRITISH GUIANA GOLD INDUSTRY.—The amount of gold entered at the Custom House, Georgetown, on the 13th December, for shipment by the R.M.S. *Esik*, which sailed the same afternoon, was 4509 ounces 16 dwts. 11 grains, to the value of \$80,214 14, an increase in the previous shipment of 4496 ounces 17 dwts. 21 grains, to the value of \$80,291. With this addition the total output for the year amounts to 119,224 ounces 14 dwts. 21 grains, to the value of \$2,124,897 02. The following is the return of gold entered at the office of the Department of Mines for the week ending 15th December, 1894:—Barima, 288 ounces 12 dwts. 15 grains; Barama, 161 ounces 10 dwts. 1 grain; Cuyuni, 1232 ounces 4 dwts. 5 grains; Puruni, 36 ounces 11 dwts. 15 grains; Mazaruni, 30 ounces 6 dwts. 5 grains; Conawarook, 413 ounces 8 dwts. 20 grains; Potaro, 444 ounces 18 dwts. 5 grains; Demerara, 2 ounces 14 dwts. 10 grains. Total, 2550 ounces 6 dwts. 4 grains. The Arakaka Placer and Mining Company paid a dividend of 25 c. per share on December 27th.

## NEW ISSUE.

### MOORE'S RHODESIA CONCESSION (LIMITED).

We have received a draft prospectus of this company, which, we understand, will be publicly advertised on Wednesday next. The capital is £150,000, in 150,000 shares of £1 each. "It is formed to acquire," says the prospectus, "a concession from the British South Africa Company to Mr. Henry Clay Moore, granting exclusive rights of mining minerals and metals over about 75 square miles in Matabeleland and Mashonaland, subject to the mining regulations of the British South Africa Company. This concession is regarded as quite exceptional, and covers a greater area than can probably again be acquired under one grant."

"Mr. Moore visited Matabeleland and Mashonaland prior to the time of the British South Africa Company's charter, and had sought from King Lobengula certain rights, which eventually resulted in the granting by the British South Africa Company of the present concession. Utilising his knowledge of the country, and having satisfied himself of the existence of old workings and reefs in the neighbourhood of the Mazoe River, Mr. Moore made selection of his ground under the concession in that district. In May, 1893, Mr. D. Tyril Laing was sent in charge of a party of prospectors, specially to explore the concession. During the four months he was working on the concession, he discovered and prospected many gold reefs, and has written very full reports, and—which, with his diaries, may be seen at the offices of the company." Reporting on a portion of the old workings discovered on the property, Mr. Laing writes, under date August 18, 1893, as follows:—"The vein is composed of solid quartz of mixed colours . . . and is highly mineralised, showing visible gold in large quantities, both fine and coarse, also galena, iron pyrites, &c. (one-third of the rock blasted out showing visible gold). Milling assays made of quartz not showing visible gold gave results equal to 2 ounces 8 dwts. per ton of ore. . . . I went along the gallery to the east over 40 feet; the angle of dip was about 60°. All this distance the width between the hanging and foot walls varied from 1 foot to 4 feet, the average being 3 feet. The above may appear over-good, but the assays were made of the poorest stuff, that is to say the quartz that showed no visible gold. . . . The pillars of rich quartz left standing in the old galleries, &c., point to the fact that the lode was a very rich one, and near the surface, and I can see no reason why it should not continue so to any depth. The quartz blasted out by myself is as rich as any I have seen in the Transvaal in some of the best mines. . . . I certainly am of opinion that the reef is well worth looking for by prospecting shafts, and if it is found it won't be deeper than 60 or 70 feet on the incline, and if it does not prove a very valuable lode I shall be extremely disappointed. I think everything points to it being a rich and strong vein." In his report dated 23rd August, 1893, he further says:—"On the concession I know of nine quartz reefs that carry gold, &c. . . . Some of these reefs have been prospected to depths ranging from surface cuttings to shaft 50 to 30 feet deep.—Water. The concession is well supplied with water—three small rivers and several good-sized streams run across its surface.—Timber. There are even different kinds of timber growing on the property, which will be found useful for mining and other purposes. The supply would last for many years." And he adds, as the result of his prospecting:—"The foregoing facts go to prove that the different formations in Moore's Concession and the district which surrounds it, are highly favourable for the occurrence of highly mineralised gold-bearing lodes, many of which will shortly be proved beyond doubt, and their stability established, and, if worked on an economical system will, in my opinion, prove dividend paying."

"It is proposed to systematically prospect the whole concession, and to further open up the most promising of the reefs referred to above, with a view to the formation of subsidiary companies to work them. The Beira Railway, now completed to Chimoino, will greatly facilitate the transport of machinery and goods into Rhodesia."

OCEANA COMPANY (LIMITED).—At a meeting held on Wednesday, at Cannon-street Hotel, Mr. W. H. Pascoe presiding, the resolutions passed on December 21, were unanimously confirmed.

GOLDEN FEATHER CHANNEL (LIMITED).—An extraordinary general meeting of the shareholders of this company was held on Tuesday, at the offices, St. Stephen's Chambers, Telegraph-street, E.C., at which the resolutions for the voluntary winding-up and reconstruction of the company, passed at the extraordinary general meeting held on December 20, were unanimously confirmed.

THE INSTITUTION OF MINING AND METALLURGY.—The fourth ordinary meeting of the fourth session of this institution will be held on the evening of Wednesday, January 16, in the Lecture Theatre of the Geological Museum, Jermyn-street, S.W., at eight o'clock, when a paper will be read on "Gold Mining and Milling in the Black Hills (S. Dakota)," by Mr. C. G. Warnford Lock.

ZEITUNGS-KATALOG, 1895.—We have to acknowledge receipt of this valuable and artistic publication. It is published by Rudolph Mosse.

RAINFALL AT COOLGARDIE.—Coolgardie, West Australia, 9th January. It has rained heavily, and all tanks are full.

AUSTRALIAN EXPORTS.—The exports for December were—copper, 900 tons; copper ore, 200 tons; tin, 200 tons.

WEST AUSTRALIAN GOLD EXPORTS.—The total value of gold exported last year was £787,100, as against £421,183 in 1893.

—The certificates in the GOLD ESTATES OF AUSTRALIA (LIMITED) will be ready for issue on Wednesday, the 23rd instant.

—At the meeting of the WESTERN AUSTRALIAN DEVELOPMENT CORPORATION (LIMITED) held on Wednesday, at the Westminster Palace Hotel, the directors recommended an interim dividend at 25 per cent.

—The JOHANNESBURG CONSOLIDATED INVESTMENT COMPANY (LIMITED) has removed to No. 7, Lothbury, E.C. It has been appointed London agent to the following Johannesburg gold mining companies:—New Primrose Gold Mining Company (Limited); Glencairn Main Reef Gold Mining Company (Limited); Langlaagte Royal Gold Mining Company (Limited); New Spes Bona Gold Mining Company (Limited); New Unified Main Reef Gold Mining Company; and the Rodepoort Gold Gold Mining Company (Limited).

—The directors of the NORTH QUEENSLAND MINES AGENCY (LIMITED) have declared an interim dividend for the half-year ending December 31, at the rate of 25 per cent. per annum, free of income-tax.

—The directors of the PEEL RIVER LAND AND MINERAL COMPANY (LIMITED) have decided to recommend a final dividend of 2 per cent., free of income-tax, making, with the interim dividend paid in July, a total distribution of 4 per cent. for the year ending June 30.

—The Transvaal Mortgage, Loan and Finance Company (Limited) has received a cablegram from the head office of the SIMMER AND JACK GOLD MINING COMPANY (LIMITED), announcing that an interim dividend of 10 per cent. has been declared.

—The board of the WORCESTER EXPLORATION AND GOLD MINING COMPANY (LIMITED) has declared a dividend of 20 per cent.

—The board of the WEST AUSTRALIAN GOLD CONCESSIONS has declared a quarterly interim dividend of 1s. per share, equal to 20 per cent. per annum.

—The OOREGUM GOLD MINING COMPANY OF INDIA (LIMITED) have sold the gold obtained November for £19,754 11s. 11d.



## EXPORT AND IMPORT TRADE.

THE BOARD OF TRADE RETURNS—DECEMBER  
TABULAR STATEMENT.Specially compiled for "The Mining Journal" from the  
Board of Trade Returns.

THE Board of Trade Returns for December, issued on Tuesday, show that the imports for the month amounted to £33,070,480, as against £36,748,720 for the corresponding month of last year, being a decrease of £3,678,240. The exports for the month amounted to £17,500,585, compared with £17,269,074 in December 1883, or an increase of £231,511. The imports for the 12 months ending 31st December amounted to £408,505,718, compared with £404,688,178 for the 12 months ending 31st December 1883, being an increase of £3,817,540. The exports for the 12 months ending 31st December amounted to £216,194,239, as against £218,094,865 for 1883, being a decrease of £1,900,626.

## EXPORTS:—SUMMARY OF INCREASES AND DECREASES.

PRINCIPAL AND OTHER ARTICLES.	QUANTITIES.		VALUE.	
	INCREASE.	DECREASE.	INCREASE.	DECREASE.
Raw Materials:				
Coal and Fuel, Ton	324,860	—	—	18,139
Coal, &c., shipped for steamers' use	82,206	—	—	—
Metals:				
Brass, and manufactures of	—	434	—	2,808
Copper, unwrought and wrought	18,697	—	26,205	—
Hardware and cutlery	—	—	—	14,225
Iron, unwrought and wrought	—	—	—	12,514
Lead, pig, rolled, &c.	5,386	—	133,491	—
Plate, and plated gilt wares	—	986	—	11,049
Telegraph wires, &c.	—	—	7,271	—
Tin, unwrought	273	—	—	5,375
Zinc or Spelter	8,098	—	4,346	—
Other Articles	—	—	—	17,807
Total	—	—	178,823	63,778
Machinery:				
Steam engines	—	—	—	31,592
Other descriptions	—	—	—	16,414
Total	—	—	31,592	16,414
Alkali	—	—	—	15,178
Cement	—	—	—	—
Products of coal (including paraffin, petroleum, &c.)	—	—	—	—

## EXPORTS:—BRITISH AND IRISH PRODUCE.

PRINCIPAL AND OTHER ARTICLES.	QUANTITIES.		VALUES.	
	Month ended Dec. 31.	Month ended Dec. 31.	Month ended Dec. 31.	Month ended Dec. 31.
Metals and Articles Manufactured therefrom (except Machinery):				
Brass, and Manufactures of, not being Ordnance	1893. Cwts.	1894. Cwts.	1893. £	1894. £
Copper: Unwrought, in ingots, cakes, or slabs, and Precipitate	7,989	7,554	31,937	29,149
To Germany	3,568	3,362	6,196	7,122
"Holland	2,172	5,760	18,712	12,391
"Belgium	660	1,800	1,521	3,727
"France	4,957	11,655	11,935	24,988
"Italy	2,317	1,546	4,417	3,564
"British East Indies	1,020	76	2,425	170
"Other countries	4,100	3,353	9,782	7,293
Total	24,787	27,582	56,983	58,955
Wrought, or Manufactures, unenumerated:				
To Sweden and Norway	1,174	2,801	3,532	7,672
"Germany	343	131	1,300	577
"Turkey	6,801	2,997	18,434	7,984
"Egypt	3,051	1,849	5,222	4,946
"Brazil	628	1,440	1,810	3,988
"British East Indies	7,250	15,038	18,658	35,663
"Australasia	1,312	874	4,040	782
"Other countries	6,601	4,832	20,058	14,147
Total	26,980	29,755	75,848	77,739
Mixed or Yellow Metal:				
To China and Hong Kong	1,136	513	2,684	1,132
"British East Indies	13,152	27,000	78,003	53,965
"Other countries	5,280	5,211	13,759	11,726
Total	19,578	32,724	44,446	66,823
Total of Copper	71,345	90,042	177,282	203,437

PRINCIPAL AND OTHER ARTICLES.	QUANTITIES.		VALUES.	
	Month ended Dec. 31.	Month ended Dec. 31.	Month ended Dec. 31.	Month ended Dec. 31.
Metals and Articles Manufactured therefrom (except Machinery):				
Brass, and Manufactures of, not being Ordnance	1893. Cwts.	1894. Cwts.	1893. £	1894. £
Copper: Unwrought, in ingots, cakes, or slabs, and Precipitate	7,989	7,554	31,937	29,149
To Germany	3,568	3,362	6,196	7,122
"Holland	2,172	5,760	18,712	12,391
"Belgium	660	1,800	1,521	3,727
"France	4,957	11,655	11,935	24,988
"Italy	2,317	1,546	4,417	3,564
"British East Indies	1,020	76	2,425	170
"Other countries	4,100	3,353	9,782	7,293
Total	24,787	27,582	56,983	58,955

PRINCIPAL AND OTHER ARTICLES.	QUANTITIES.		VALUES.	
	Month ended Dec. 31.	Month ended Dec. 31.	Month ended Dec. 31.	Month ended Dec. 31.
Metals and Articles Manufactured therefrom (except Machinery):				
Brass, and Manufactures of, not being Ordnance	1893. Cwts.	1894. Cwts.	1893. £	1894. £
Copper: Unwrought, in ingots, cakes, or slabs, and Precipitate	7,989	7,554	31,937	29,149
To Germany	3,568	3,362	6,196	7,122
"Holland	2,172	5,760	18,712	12,391
"Belgium	660	1,800	1,521	3,727
"France	4,957	11,655	11,935	24,988
"Italy	2,317	1,546	4,417	3,564
"British East Indies	1,020	76	2,425	170
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Total	24,787	27,582	56,983	58,955

PRINCIPAL AND OTHER ARTICLES.	QUANTITIES.		VALUES.	
	Month ended Dec. 31.	Month ended Dec. 31.	Month ended Dec. 31.	Month ended Dec. 31.
Metals and Articles Manufactured therefrom (except Machinery):				
Brass, and Manufactures of, not being Ordnance	1893. Cwts.	1894. Cwts.	1893. £	1894. £
Copper: Unwrought, in ingots, cakes, or slabs, and Precipitate	7,989	7,554	31,937	29,149
To Germany	3,568	3,362	6,196	7,122
"Holland	2,172	5,760	18,712	12,391
"Belgium	660	1,800	1,521	3,727
"France	4,957	11,655	11,935	24,988
"Italy	2,317	1,546	4,417	3,564
"British East Indies	1,020	76	2,425	170
"Other countries	4,100	3,353	9,782	7,293
Total	24,787	27,582	56,983	58,955

## BRITISH AND IRISH PRODUCE—Continued.

PRINCIPAL AND OTHER ARTICLES.	QUANTITIES.		VALUES.	
	Month ended Dec. 31.	Month ended Dec. 31.	Month ended Dec. 31.	Month ended Dec. 31.
Plate & Plated & Gilt Wares—Telegraphic Wires, & apparatus connected therewith	—	—	29,741	37,112
Tin, unwrought:				
To Russia	673	1,405	2,796	4,925
"Sweden and Norway	472	455	1,916	1,539
"Germany	1,042	89	4,084	2,767
"France	1,367	561	5,152	3,249
"Turkey	1,041	1,049	4,275	3,899
"United States	50	20	122	670
"British North America	1,212	371	4,923	1,145
"Other countries	3,853	4,561	15,652	15,582
Total	9,538	9,609	38,922	33,547
Zinc or Spelter: Unwrought and Wrought	12,083	20,181	9,381	13,727
Total of Principal Articles	—	—	2,054,781	2,187,423
other Articles	—	—	68,826	51,019
Total of Metals and Articles Manufactured therefrom (except Machinery)	—	—	2,123,607	2,238,452
Alkali	427,740	571,121	126,352	134,538
Cement	30,223	22,302	52,054	36,182
Products of coal (including paraffin, petroleum, &c.)	—	—	104,083	132,250

## MACHINERY.

PRINCIPAL AND OTHER ARTICLES.	QUANTITIES.		VALUES.	
	Month ended Dec. 31.	Month ended Dec. 31.	Month ended Dec. 31.	Month ended Dec. 31.
Mining: (Not Steam Engines)				
To Countries in Europe	—	—	1,203	1,069
"United States	—	—	6,975	3,051
"Countries in South America	—	—	19,611	24,225
"British Possessions in S. Africa	—	—	6,679	3,535
"East Indies	—	—	299	243
"Australasia	—	—	1,605	896
"Other Countries	—	—	—	—
Total	—	—	38,369	33,519
Total of Machinery other than Steam Engines	—	—	858,783	839,369
Total of Steam Engines	—	—	208,347	239,939
Total of Machinery and Mill Work	—	—	1,067,130	1,079,308

## EXPORTS OF FOREIGN AND COLONIAL MERCHANDISE.

PRINCIPAL ARTICLES.	QUANTITIES.		VALUES.	
	Month ended Dec. 31.	Month ended Dec. 31.	Month ended Dec. 31.	Month ended Dec. 31.
	1893.	1894.	1893.	1894.
Copper:				
Unwrought and part wrought	757	378	38,457	15,605
Iron and Steel:				
Bar, angle, bolt, and rod	1,839	2,006	15,088	13,254
Steel, unwrought	957	354	6,253	3,927
Manufactures:				
Girders, beams, and pillars	21	23	177	91
Unenumerated	70,508	39,654	39,448	26,992
Petroleum	18,792	117,709	5,843	5,742
Quicksilver	157,395	220,403	13,085	19,428
Saltpetre	1,678	5,931	1,370	5,488
Tin, in blocks, ingots, bars, or slabs	15,869	42,868	60,073	141,797

## IMPORTS.

PRINCIPAL AND OTHER ARTICLES.	QUANTITIES.		VALUES.	
	Month ended Dec. 31.	Month ended Dec. 31.	Month ended Dec. 31.	Month ended Dec. 31.
Metals:				
Copper: Ore	—	1,429	13,788	—
Regulus	—	1,159	—	8,481
Unwrought and part wrought	349	—	5,779	—
Iron: Ore	37,402	—	22,162	—
Regulus	3,574	—	19,820	—
Steel, unwrought	—	4,943	—	6,983
Pyrites of iron or copper	—	—	48,720	—
QUICKSILVER	—	—	2,965	—
SILVER ORE	—	54,575	—	4,655
TIN, in blocks, &c.	—	—	5,146	—
ZINC, crude	—	433	—	17,487
OTHER ARTICLES	—	—	29,545	—
Total	—	—	94,359	221,111
Chemicals:				
ALKALI	13,469	—	4,446	—
BRIMSTONE	—	38,378	—	8,611
SALT PETRE	3,060	—	3,022	—
Iron Manufactures:				
Beams, girders, &c.	797	—	3,625	—
Unenumerated	—	74,218	—	40,825
ZINC MANUFACTURES	—	3,779	—	6,023

## FOREIGN AND COLONIAL PRODUCE.

PRINCIPAL AND OTHER ARTICLES.	QUANTITIES.		VALUES.	
	Month ended Dec. 31.	Month ended Dec. 31.	Month ended Dec. 31.	Month ended Dec. 31.
	1893.	1894.	1893.	1894.
Copper:				
Ore: From Spain	2,928	372	7,130	1,935
"Italy	500	130	2,200	680
"United States	145	173	2,210	2,115
"Venezuela	—	—	—	—
"Chili	117	1,589	1,485	14,160
"Cape	—	1,437	—	14,370
"British N. America	2,425	1,595	5,250	2,393
"Other countries	808	439	8,283	4,783
Total	7,134	5,705	26,558	40,346
Regulus and Precipitate:				
From Portugal	318	900	7,416	27,000
"Spain	6,282	4,395	143,830	104,417
"United States	1,042	1,741	26,286	40,895
"Chili	21	27	630	675
"Other countries	2,039	1,460	19,585	26,380
Total	9,682	8,523	207,748	199,367
Unwrought and part Wrought:				
From United States	2,567	2,121	114,385	90,327
"Chili	620	580	26,880	27,983
"Australasia	474	439	21,400	18,800
"Other countries	146	1,014	6,733	43,867
Total	3,807	4,154	169,398	175,177
Iron and Steel:				
From Spain	256,372	303,063	168,918	197,694
Iron ore: Other countries	23,457	14,118	17,513	10,897
Total	279,779	317,181	186,429	208,591
Iron, bar, angle, bolt, & rod	4,612	8,186	41,615	61,435
Steel, unwrought	1,842	1,090	15,885	8,722
Lead, pig and sheet	17,188	12,225	168,098	119,306
Pyrites of iron or copper or sulphur	49,724	83,077	81,082	94,787
Quicksilver	75,395	21,775	6,435	1,783
Silver Ore	—	—	261,440	165,293
Tin, in blocks, ingots, bars, or slabs:				
From Straits Settlements	36,181	27,567	139,481	80,961
"Australasia	8,660	10,182	34,095	33,649
"Other countries	6,536	7,589	12,167	22,123
Total	50,477	45,331	184,773	145,733
Zinc, crude in cakes	8,359	4,928	91,423	72,936
Total of principal articles	—	—	1,431,012	1,284,415
other articles	—	—	136,810	168,355
Total of metals	—	—	1,567,822	1,452,770

## THE METAL MARKETS.

## LONDON METAL MARKET.

THE METAL MARKET, LONDON, JANUARY 11.

## Copper.

ON first 'Change, Monday, the G.M.B. market was fairly firm, and the cash price improved slightly to £40 16s. 3d., but moderate sales sufficed to depress the value later in the day to £40 11s. 3d. The turn-over amounted to about 50



# "THE MINING JOURNAL" SHARE LIST.

**ABBREVIATIONS AND REFERENCES.**—The following are the significations of the abbreviations and references which occur in the Share List:—A, Antimony; As, Arsenic; B, Blende; Br, Borax; C, Copper; D, Diamond; G, Gold; I, Iron; L, Lead; M, Manganese; N, Nitrates; P, Phosphates; Q, Quicksilver; R, Ruby; S, Silver; S-L, Silver-lead; Sul, Sulphur; T, Tin; and Z, Zinc. \* In the "called up" column of British Mines, signifies that the mine is conducted on subject to the Limited Liability Law of the South African Republic. † The following is by far the most complete and comprehensive list of mines, in whose shares business is being currently transacted, published. Additions will be made from time to time as occasion requires. Every effort is made to ensure accuracy, and Secretaries of Companies, Share dealers, and our readers generally, are cordially invited to co-operate with us to this end, by notifying us of any errors that may at any time occur. We desire it to be understood that, while our Share List will almost invariably be found correct, we do not hold ourselves responsible for any loss or inconvenience that may arise from possible inaccuracies.

## BRITISH MINES.

Name.	Closing Price, Jan. 11, 1895.	Closing Price, Jan. 4, 1895.	Par.	Latest Dividend.	Called up Per Share.	Amount of Stock or No. of Shares Issued.	Situation of Mine.	Head Office.
Blue Hills .....CT	2/6 5/-	2/6	5/-	2/- May '81	5 15 6	5,353	Cornwall	Camborne.
Botallack .....J	3/4 3/4	3/4	3/4	—	51 4 6	1,880	Cornwall	St. Just.
Carn Brea .....J	2 3/4	3	3	2/6 Dec. '93	22 8 5	5,000	Cornwall	Carn Brea.
Cook's Kitchen .....J	—	—	—	—	35 15 10	4,900	Cornwall	Camborne.
Devon Ganton CA	par 3/4 pm.	p.k.p.m.	1 0	—	0 7 6	25,000	Near Tavistock	S. Finabury circus.
Devon G. Cons. CA	1 1/4 1 1/4	1 1/4	5 0	3/- Nov. '94	2 0 0	10,240	Devon	S. Finabury circus.
Dolcoath .....J	34 3/4 35 1/4	33	5 0	12/6 Apr. '94	9 12 6	4,700	Cornwall	Camborne.
Drakewalls CTM	1 1/2 1 1/2	1 1/2	0 5	—	0 2 0	61 5 6	Cornwall	Dashwood House.
East Pool .....AT	3 3/4 3 3/4	3 3/4	—	1/6 Sept. '94	0 9 9	6,400	Cornwall	Illogan.
Gawton .....CA	—	—	2 10	—	2 7 2	12,000	Devon	20, Great St. Helens.
Great Laxey .....CA	1 1/2 2	1 1/2	4 0	5/- Apr. '92	4 0 0	15,000	Isle of Man	Douglas, Isle of Man.
Green Hurth .....L	1 1/2	1 1/2	1 0	7/6 June '89	0 19 0	32 0 0	Cumberland	Newcastle.
Halkyn .....L	—	—	1 0	2/- Dec. '94	1 0 0	10,000	Flintshire	Chester.
Hexworthy .....J	—	—	1 0	—	1 0 0	14,634	Devon	6, Queen-street-place
Isle of Man .....L	—	—	5 0	1/6 Dec. '94	5 0 0	14,000	Cornwall	Truro.
Killfretth .....L	1 1/4 1 1/4	1 1/4	—	1/6 Nov. '94	5 11 6	6,000	Cornwall	Truro.
Leadhills .....L	15/- 20/-	15/-	6 0	3/- Sep. '92	6 0 0	20,000	Northumberland	3, Gt. Queen-st. S.W.
Levant .....CT	3 3/4 4	3 3/4	—	4/- Nov. '94	11 9 6	2,500	Cornwall	Pennance.
Lovell .....L	—	—	—	1/3 Nov. '91	1 16 7	7,165	Wendron	3, Gt. Queen-st. S.W.
Miners .....L	—	—	5 0	5/6 Mar. '90	5 0 0	9,000	Northumberland	Newcastle-on-Tyne.
Nenthead & Tindie, LZ	2 1/2	2 1/2	1 0	6 1/2 Feb. '91	0 18 0	48 5 0	Cornwall	Camborne.
New Cooke & Kibb, CT	—	—	1 0	—	10 13 3	4,900	Cornwall	6 Queen-street-place.
New Miners .....L	—	—	1 0	1/- Oct. '92	1 0 0	30,000	North Wales	Blithfield sq. buildings
Phoenix United TC	1 1/8 2 1/2	1 1/8	—	1/- Mar. '90	7 6 6	10,686	Cornwall	37, Walbrook.
Polberro .....J	7/6 12/6	7/6	—	—	3 7 9	18,000	Cornwall	Pool, Cornwall.
So. Condurrow TC	2/6 5/-	2/6	—	3/6 Apr. '93	7 17 6	6,123	Cornwall	Redruth.
South Crofty TA	5/ 10/	7/6	—	—	17 7 6	6,120	Cornwall	Carn Brea.
S. Frances Ltd., J	2/6 7/6	2/6	—	—	2 7 6	6,000	Cornwall	3, Lombard-court.
Tincroft .....J	4 4 1/2	5	—	2/- Aug. '94	15 7 6	6,000	Cornwall	Camborne.
Weardale .....L	9/-	9/-	4 0	1/3 Oct. '90	10 10 0	60,000	Durham	3, Lombard-court.
West Franches TC	2/6 7/6	2/6	—	2/6 May '99	16 4 7	5,144	Cornwall	37, Walbrook.
West Kitty .....J	4 4 1/2	4 1/2	—	2/6 Dec. '94	1 2 0	6,000	Cornwall	Redruth.
Wheal Agar TA	2/6 7/6	2/6	—	2/6 Aug. '94	23 15 2	6,000	Cornwall	Redruth.
Wheal Basset TC	10/ 15/	7/6	—	10/- Apr. '88	0 12 0	10,000	Cornwall	1, Gt. Cannon-st., E.C.
Wheal Friendship, J	1/6 1/-	1/6	—	—	0 12 0	10,000	Cornwall	7, Union-court, E.C.
Wheal Grenville TC	11 12	12	—	2/6 Nov. '94	18 2 0	6,000	Cornwall	Truro.
Wheal Kitty .....J	1 1/2 3/-	1 1/2	—	3/- Mar. '88	4 5 6	8,890	Cornwall	14, Broad-street Av.
Wheal Metal & F. J	3 3/4	3 3/4	—	—	0 13 9	10,784	Cornwall	—

## AUSTRALIAN AND NEW ZEALAND MINES.

Abbotts .....G	par 3/4 pm	3/4 disp.	1 0	—	0 10 0	100,000	Murchison	17, Old Broad st.
Achilles Gld Fld.	2 1/2 3/6	2 1/2	—	—	1 0 0	30,307	New Zealand	3, Church Pas., E.C.
Aladdin Lamp G	1 1/2	1 1/2	—	1/- Dec. '94	1 0 0	75,000	N. S. Wales	4-6, Throg. Avenue.
Amara (West) G	—	—	1 0	—	1 0 0	100,000	Queensland	5, Throg. Avenue.
Anglo-Saxon G	—	—	1 0	2/- July '89	1 0 0	51,000	Queensland	23, College Hill, E.C.
Austin .....G	1 1/4 1 1/4	1 1/4 pm	1 0	—	1 0 0	50,000	Queensland	6, Queen-st. place
Australasian G	4/- 4/6	4/-	—	—	7 7 6	18,315	N. S. Wales	18, Old Jewry Chhrs
Australian G	—	—	20 0	—	1 0 0	210,000	Queensland	Dashwood House.
Aus. Bro. Hill Con.	2/- 2/6	1 1/2	1 0	1/- June '91	1 0 0	537,138	N. S. Wales	Hillgrove, N. S. Wales
Baker's Creek G	1 1/4 1 1/4	1 1/4	1 0	1/- Dec. '94	0 17 6	10,000	Queensland	2, Met. Ex. Buildings
Bayley's Reward G	13/6 14/6	15/-	1 0	—	1 0 0	480,000	W. Australia	Honfield Ho., E.C.
Big Blow .....G	11/3 13/9	13/9	1 0	—	1 0 0	100,000	W. Australia	14, Sherborne in., E.C.
Blackett's Claim G	1 1/2 1 1/2	1 1/2	—	—	1 0 0	60,000	Queensland	1, Gt. St. Helens
Blue Spur & G. G.	1/6 1/-	1/6	—	—	1 0 0	80,000	Queensland	1, Gt. St. Helens
Bonnie Dundee G	12/- 13/-	11/-	1 0	—	0 10 0	120,000	Queensland	3, Gracechurch-st.
Brilliant .....G	19/- 20/-	20/6	2 0	—	2 0 0	250,000	Queensland	3, Gracechurch-st.
Brilliant Block G	1 1/2 2	1 1/2	2 0	—	2 0 0	250,000	Queensland	3, Gracechurch-st.
Brilliant, St. Geo.	28/ 20/	28/-	0 10	—	6 3	72,000	Queensland	3, Gracechurch-st.
Brit. Brok. Hill S.	5/6 6/6	5/-	0 5	—	0 5	240,000	N. S. Wales	Dashwood Ho., E.C.
Broken Hill Prop.	11 1/2 11 1/2	11 1/2	1 0	—	0 5	960,000	N. S. Wales	Dashwood Ho., E.C.
Cashman Hill G	3 1/2 3 1/2	3 1/2	1 0	—	0 5	100,000	Queensland	14, Sherborne in., E.C.
Carriington G	3 1/2 3 1/2	3 1/2	1 0	—	0 5	100,000	Queensland	14, Sherborne in., E.C.
Con. G. M. of W. A.	par 3/4 pm	3/4 pm	1 0	—	0 12 6	90,000	Queensland	5, Tokenhouse Yard.
Coolgardie G	10/- 11 1/4	10/-	0 2	—	0 6	40,000	Queensland	5, Tokenhouse Yard.
Crown's Cal. G	3/ 4/	3/-	0 5	—	0 4	100,000	Queensland	5, Tokenhouse Yard.
Croydon King B. G	3/ 5/	3/-	0 5	—	0 5	80,000	Queensland	5, Tokenhouse Yard.
Cumbrind (New) G	6/ 6/6	6/6	1 0	—	1 0 0	184,890	Queensland	5, Tokenhouse Yard.
Day Dawn B. & W. G	11/- 12/-	11/-	1 0	—	1 0 0	498,400	Queensland	5, Tokenhouse Yard.
Day Dawn P. C. G	5/6 6/3	5/6	1 0	—	1 0 0	490,000	Queensland	5, Tokenhouse Yard.
Elephant G	2/6 3/3	3/-	1 0	—	1 0 0	120,000	Queensland	5, Tokenhouse Yard.
Empress Coal G	3 1/2 3 1/2	3 1/2	1 0	—	0 10 0	90,000	Queensland	5, Tokenhouse Yard.
Eng. & Aus. Cop. Co.	3 1/2 3 1/2	3 1/2	1 0	—	0 10 0	70,000	Queensland	5, Tokenhouse Yard.
Etheridge G	1 1/2 1 1/2	1 1/2	0 5	—	0 5	324,230	Queensland	5, Tokenhouse Yard.
Frederick the Gt G	par 3/4 pm	3/4 pm	1 0	—	1 0 0	125,000	Queensland	5, Tokenhouse Yard.
Glenrock G	2 1/2 2 1/2	2 1/2	1 0	—	1 0 0	225,000	Queensland	5, Tokenhouse Yard.
Goleconda G	1 1/4 1 1/4	1 1/4	1 0	—	1 0 0	70,000	Queensland	5, Tokenhouse Yard.
Great Boulder G	3 1/2 3 1/2	3 1/2	1 0	—	0 10 0	55,520	Queensland	5, Tokenhouse Yard.
Great Boulder G	15/ 16/	16/-	1 0	—	1 0 0	119,240	Queensland	5, Tokenhouse Yard.
Golden Gate G	2 1/2 2 1/2	2 1/2	1 0	—	0 10 0	150,000	Queensland	5, Tokenhouse Yard.
Hampton Plains G	1 1/2 1 1/2	1 1/2	1 0	—	0 4 0	350,000	Queensland	5, Tokenhouse Yard.
Hampton Plains G	1 1/2 1 1/2	1 1/2	1 0	—	0 4 0	350,000	Queensland	5, Tokenhouse Yard.
Hannan's Brown Hill	1 1/2 1 1/2	1 1/2	1 0	—	0 4 0	350,000	Queensland	5, Tokenhouse Yard.
Harrietville G	1 1/2 1 1/2	1 1/2	1 0	—	0 4 0	350,000	Queensland	5, Tokenhouse Yard.
Kaboonga G	2/6 3/3	3/-	0 10	—	0 9 9	500,000	Queensland	5, Tokenhouse Yard.
Kangarilla G	4/ 5/6	3/-	1 0	—	1 0 0	88,275	Queensland	5, Tokenhouse Yard.
Kapanga G	5/ 5/6	6/-	1 0	—	0 19 6	250,000	Queensland	5, Tokenhouse Yard.
Kilbrann G	1/6 2/6	1/6	1 0	—	1 0 0	81,292	Queensland	5, Tokenhouse Yard.
Kinsland G	16/3 21/3	17/6	1 0	—	1 0 0	80,000	Queensland	5, Tokenhouse Yard.
Londonderry G	3 1/2 3 1/2	3 1/2	1 0	—	0 15 0	467,000	Queensland	5, Tokenhouse Yard.
L. & W. Aust. G	1 1/2 1 1/2	1 1/2	1 0	—	0 10 0	60,000	Queensland	5, Tokenhouse Yard.
Mawson's Reward G	20/ 22/6	20/-	1 0	—	0 10 0	60,000	Queensland	5, Tokenhouse Yard.
Mills' Day Dawn G	1 1/2 1 1/2	1 1/2	1 0	—	0 15 6	300,000	Queensland	5, Tokenhouse Yard.
Moanman G	—	—	1 0	—	1 0 0	55,235	N. S. Wales	16, St. Helen's-place.
Mt. Leyshon G	—	—	1 0	—	1 0 0	157,989	Queensland	7, Draper's-gardens.
Mountain Maid G	2/- 3/-	2/-	0 10	—	0 6 3	56,000	Queensland	Leadhill Bldgs.
Mount Morgan G	3 1/2 3 1/2	3 1/2	1 0	—	0 17 6	1,000,000	Queensland	50, Lime-street.
Mount Zechariah S.	6/ 8/	7/6	1 0	—	1 0 0	193,257	Tasmania	Mansion Ho. Oham.
N. Smithfield G	6/ 8/	7/6	1 0	—	0 10 0	48,000	Queensland	5, Tokenhouse Yard.
New Queen G	6/ 8/	7/6	1 0	—	0 19 6	158,915	Queensland	5, Tokenhouse Yard.
Phoenix Gold Pile G	—	—	0 5	—	0 5	43,000	Queensland	5, Tokenhouse Yard.
Port Phillip G	—	—	0 5	—	0 5	200,000	Queensland	5, Tokenhouse Yard.
Queen's Bldy Un	9/- 10/-	11/-	1 0	—	0 12 6	75,000	Queensland	5, Tokenhouse Yard.
Scottish Australian	—	—	1 0	—	0 10 0	200,000	N. S. Wales	Winchester Ho. E.C.
Scruburn G	—	—	1 0	—	0 10 0	150,000	Queensland	9, Tokenhouse Yard.
True Blue G	—	—	1 0	—	0 10 0	53,000	Australia	Leadhill Bldg. E.C.
Victoria Assn. G	—	—	1 0	—	0 10 0	144,000	Queensland	5, Crosby-square
Victory G	8/- 9/	7/6	1 0	—	0 9 9	200,000	Queensland	5, Crosby-square
Walbi G	6 5/6	6 1/2	1 0	—	1 0 0	150,000	New Zealand	11, Abchurch-lane, E.C.
Westworth Ord. G	6/ 7/	6/-	1 0	—	1 0 0	350,000	N. S. Wales	4-6, Throgmorton Av.
West. Priority G	15/- 17/-	15/-	1 0	—	0 19 6	150,000	N. S. Wales	4-6, Throgmorton Av.
W. Argentine G	1/9 2/3	2/3	1 0	—	0 19 6	150,000	N. S. Wales	4-6, Throgmorton Av.
W. Aust. Oceania W.	1 1/2 1 1/2	1 1/2	1 0	—	0 15 0	175,000	W. Australia	33, Old Broad st., E.C.
W. Aust. Exploring	1 1/2 1 1/2	1 1/2	1 0	—	0 15 0	200,000	W. Australia	33, Old Broad st., E.C.
W. Australian G.F.	3 1/2 3 1/2	3 1/2	1 0	—	0 15 0	65,000	W. Australia	33, Old Broad st., E.C.
W. Aust. Mining	3 1/2 3 1/2	3 1/2	1 0	—	0 15 0	65,000	W. Australia	33, Old Broad st., E.C.
W. Malina G	2 1/2 2 1/2	2 1/2	1 0	—	0 15 0	65,000	W. Australia	33, Old Broad st., E.C.
White Feather G	2 1/2 2 1/2	2 1/2	1 0	—	0 15 0	65,000	W. Australia	33, Old Broad st., E.C.
Zechariah Montana S	—	—	1 0	—	0 15 0	65,000	W. Australia	33, Old Broad st., E.C.
Zechariah Montana S	—	—	1 0	—	0 15 0	65,000	W. Australia	33, Old Broad st., E.C.

## EUROPEAN MINES.

Alamillos .....J	10/- 15/-	10/-	2 0	—	2 0 0	25,000	Spain	8, Queen-street-place
Avala .....Q	—	—	1 0	—	1 0 0	150,000	Servia	4, Tokenho. Bldgs.
Consett Ore .....J	5 3/4	5 3/4	1 0	—	55 29	55,29	Spain	19, Grey-st. N. Castle.
English Cr. Spelter	3 3/4 3 3/4	3 3/4	1 0	—	84,000	84,000	Lombardy	9, Queen-street-place
Fortuna .....J	17/6 22/6	17/6	2 0	—	25,000	25,000	Spain	8, Queen-street-place
Libiola .....J	3 3/4 3 3/4	3 3/4	1 0	—	50,400	50,400	Spain	Dashwood Ho., E.C.
Linares .....J	3 3/4 3 3/4	3 3/4	1 0	—	14,958	14,958	Spain	6, Queen-street-place
Mason & Barry G	1 1/2 2	1 1/2	3 0	—	185 172	185,172	Portugal	87, Cannon-street.
Oscar .....G	—	—	0 4	—	117,244	117,244	Norway	6A, Queen Priars.
Pestareza .....G	5/6 6/6	7/6	—	—	14,000	14,000	Convent, Eri.	6, Queen-street-pl.



## AFRICAN MINES (Continued).

being rather less, broken lines have attracted less attention, and only varied between 35s. 3d. and 36s. 6d., are now 35s. 9d. African Gold R-covers are at 5s. 6d.; Bayley's Reward, 14s. 3d.; Balkis Easter-7s. 9d.; Balkis Land, 5s. 9d.; Barrett, 12s. 3d.; Buffeldoon, 67s. 6d.; Consolidated Gold Fields Deferred, 7; ditto Preferred, 21s. 6d.; Caratal, 1s. 1d.; Croesus, 48s. 9d.; Callao Dis-



2s. 7½d.; Cashman's Brilliant, 17s. 6d.; Champ d'Or Deep, 25s.; Dickens Custer, 1s. 9d.; Dav Dawn Block, 10s. 6d.; East Rand 52s. 6d.; Frank Johnson, 19s. 6d.; Goldenhuis Main, 18s.; Guy Fawkes, 11s.; Gold Fields Deep, 78s. 9d.; Hampton Plains, 31s.; Idaho, 3s. 6d.; Jay Hawk, 1s. 6d.; Klerksdorp, 7s.; Kanya Exploration, 3s.; Knight's, 63s. 9d.; Langlaagte United, 52s. 6d.; Luipaard's Vlei, 16s. 6d.; Lisbon Berlyn, 5s. 9d.; Langlaagte, 85s.; Lionsdale, 13s.; La Plata, 2s. 9d.; Londonderry, 2s. 6d.; prem.; Louis d'Or, 3s. 9d.; Mount Lyell, 45s.; Mallina, 16s. 6d.; Main Reef, 17s.; Mozambique, 25s.; May, 45s.; Ophir, 3s. 9d.; Orita, 2s. 3d.; Otto's Kopje, 4s. 6d.; Pestarena, 6s.; Paarl Central, 26s. 3d.; Roodepoort Deep, 50s.; Randfontein, 21s. 3d.; St. Augustine's, 3s. 6d.; Southern Goldenhuis, 16s. 3d.; Silver King, fully paid, 2s. 9d.; St. John del Rey, 26s. 3d.; Sutherland Reef, 19s. 6d.; Van Byn, 5½; Victoria and Altamira Preference, 1s. 6d.; West Australian Exploration and Finance, 6s. 3d. prem.; Wemmer, 7½; and Wolhuter, 5½.

Shares of miscellaneous companies show little alteration. In oil companies, Broxburn are at 7½ and Young's 19s.

### EDINBURGH.

Messrs. THOMAS MILLER AND SONS, Stock and Share Brokers, 69, Hanover-street, Edinburgh, report as follows under date of January 10:—There has been a demand for Caledonian Deferred and North British Ordinary stocks, which have advanced, the former from 40 3/16 to 41 3/16, the latter from 36½ to 37½. In banks, British Linen, Clydesdale, Royal, and Union have all improved. In insurance shares there has been an advance in Alliance, Commercial Union, Globe, London and Lancashire, Northern, Royal, Scottish Union A. and Standard Life. In mining shares Arncliffe Coal has gone from 24 to 25, Stewart and Clydesdale from 7 1/16 to 7½, Arizonas from 9s. 9d. to 10s., Rio Tinto from 14½ to 15. Steel Company of Scotland shares have fallen from 4½s. 3d. to 4½s. Edinburgh United Breweries have advanced from 5½ to 6½, ditto Preference from 10 1/16 to 10½.

## REPORTS FROM THE MINES.

### BRITISH MINES.

DEVON GREAT CONSOLS.—William Clemo, January 10: The water at Watson's is in fork 3 feet below the back of the 124 fathom level, leaving 48 fathoms to reach the bottom of the engine shaft. The machinery is working well, and the draining of the workings is proceeding satisfactorily. Although we have had both frost and snow, our surface operations have all gone steadily on without let or hindrance.

FOXDALE (Isle of Man).—January 3:—Beckwith's shaft. Since last report there is an improvement in the lode driving west at the 275 fathom level. The ore-bearing part is getting wider, and certainly looking more promising than for some time past. It is also letting out more water, which we consider a favourable indication. There is no particular change in the east end—the ground is hard, consequently slow for driving. The end driving west at the 260 fathom level on the south lode, has been communicated with the winze sunk from the level above, and thoroughly ventilated this part of the mine. The lode in the present forebreast is producing about 30 cwt. of lead ore per fathom. To facilitate a speedy communication with the crosscut driving south from Bawden's engine shaft, we now purpose driving north from this point. The lode in the end driving west on north lode continues unproductive. The driving of the level east on main lode has been temporarily suspended, and the men put to rise for ventilation, and also to prove this section of ground. At the 245 fathom level east the driving has likewise been suspended for the same purpose as above-mentioned. The 230, 215, and 200 fathom level east on main lode are being carried on in their usual course, but nothing of importance to value has lately been discovered. At the 185 fathom level a crosscut is being driven south (immediately behind the east forebreast) towards Potts' shaft, from which, when far enough advanced, a rise will be put up to communicate with the sinking.—Bawden's shaft. We are now driving the shaft crosscut to intersect the north and main lodes at the 260 fathom level, where the ground, unfortunately, is very hard, so that the men are not making such progress as anticipated.—Potts' shaft. Fair speed is being made with the sinking of the shaft, since communicating with the rise above the crosscut driven south from the 170 fathoms level, old Foxdale. At present the sinking is in the south of shaft part of the main lode, where special care is required to properly secure the ground. The lode at the 170 and 155 in the ends driving east of Potts' shaft on the north lode has improved, opening out profitable ground for stoping.—(Signed) W. H. Kit's.

LEADHILLS.—W. H. Paull, January 7: Brown's vein. The vein in the 16 fathom level, driving north of Jefferys' shaft, has fluctuated a good deal in its produce during the past week, yielding at times 15 and 25 cwt. of ore per fathom, but at present contains very little ore. I treat an improvement therein will again soon take place. In the 160 fathom level, driving south of Wilson's shaft, the vein is 4 feet wide, looks promising, and carrying a good mixture of spar. The vein in stopes over this level, south of Jefferys' shaft, will produce 25 cwt. of ore per fathom. In Nos. 2, 3, and 4 stopes over the 145 fathom level, north of Jefferys' shaft, the vein is 4½ feet wide and will yield on average 30 cwt. of ore per fathom. In drift going south, over the 130 fathom level north of Jefferys' shaft, the vein is 6 feet wide, improving, and now producing good saving work. The various other points of operation in the underground department are without any material change since last report. The weather is very stormy, frost severe, and a good deal of snow has fallen, causing much hindrance to surface works.

WHEAL GRENVILLE.—January 7:—Goold's engine shaft is down 16 fathoms below the 232 fathom level. The 232 fathom level east of Goold's is worth for tin £18 per fathom. We are carrying a part of the lode only. The 220 fathom level east of Goold's is worth £12 per fathom. Fortescue's shaft is sunk 24½ fathoms below the 225 fathom level. The lode in this shaft is worth £40 per fathom. We hope in a few days to commence to drive east by a boring machine. The 225 fathom level east of Fortescue's is worth £10 per fathom. The 225 fathom level west of Fortescue's is worth £15 per fathom. The 205 fathom level east of Fortescue's is worth £12 per fathom. This end we think will soon improve. The other points in the mine are without change to note.—(Signed) C. F. Bishop.

### COLONIAL, INDIAN, AND FOREIGN MINES.

BALKIS EERSTELING.—Extracts from letters recently received from Mr. Middleton, the manager:—From manager's letter dated December 6: The drive west from the crosscut north from the bottom of the main reef pump shaft is advancing on a reef from 6 feet to 7 feet in width. The reef is composed of a dark blue quartz, carrying a large quantity of pyrites. During the week good pannings have been daily made. A great feature, and one which all mining men will consider to be decidedly promising for the future productiveness of the mine, is that the forebreast of the drive west from the bottom of the shaft produces 3 ounces 16 dwts, 12 grains. The bottom of this drive gives an assay of 7 ounces 17 dwts, whilst the ton assayed 1 ounce 5 dwts. On the eastern side of the crosscut the reef gave 8 dwts, to the ton of 2000 lbs. I hope in a week or ten days to start crushing. From the manager's letter dated December 14: The reef in the forebreast of the drives east and west from the crosscut north from the bottom of the main reef pump shaft, is from 5 to 6 feet in width, composed still of a dark blue quartz heavily impregnated with pyrites. Work is being vigorously pushed forward both at surface and underground; if each department continues as at present, we shall very soon commence crushing. In another letter of the same date, he says: In panning one has to be very careful, for the gold is so fine that the heavy pyrites carries it away. I have

decided on starting men to rise in the back of the west drive, and I hope to open good stoping ground between this and the 160 level.

CHIAPAS.—Mine report for fortnight ending November 30: Providencia Aver. Driven 13 feet 6 inches, total 196 feet. Assay 6 dwts, 12 grains gold, 5 ounces 7 dwts, 12 grains silver, and 2-11 per cent. copper. In the face has greatly improved, and from a small streak of ore it has widened out to over 6 feet in width. Sylva crosscut driven 12 feet, total 55 feet, no change. Providencia south hill crosscut No. 2 driven 6 feet, total 165 feet. No change, but has lately drained upper drift. Taylor main driven 13 feet 6 inches, total 546 feet, in a kind of elvan rock. Copper Creek crosscut No. 2 driven 2 feet 6 inches, total 97 feet 6 inches. All but holed into Santa Fé stopes. Santa Fé hill drift No. 3 driven 16 feet, total 29 feet 6 inches, no change. Jardin crosscut driven 1 foot 6 inches, total 20 feet 6 inches, no change. Taylor main drift west advanced 8 feet, total 76 feet. Suspended for the present to wait developments in Taylor's main extension.—Extraction. Old Providencia. Extracted 178 tons, which continues very good, even better than ordinary.—Santa Fé Hill. Extracted 157 tons of high grade ore. Assay 1 ounce 2 dwts, gold, 8 ounces 18 dwts, silver, and 5-21 copper.—Providencia Aver. None.—Santa Fé stopes. Extracted 161 tons. Assays 14 dwts, gold, 9 ounces 5 dwts, silver, and 4-63 per cent. copper.—Taylor No. 3 stopes (underhand). 24 tons extracted. Assays 11 dwts, gold, 7 ounces 5 dwts, silver, and 3-22 per cent. copper. Drowned out here by water. As compressor is beginning to arrive, we hope soon to have all here, and pumps again running. Work will be resumed on Copper Creek tunnel developments as soon as holed through to Santa Fé stopes.

D'ARCY ESTATES.—Report, dated December 1: Main shaft sunk 11 feet, present depth 211 feet. Diorite shows no change. Work commenced on tank station at 205 feet deep. South drive on portion three advanced 15 feet, total length 80 feet. Vein continues 6 to 10 inches wide.

MOZAMBIQUE.—Colonel Machado, Governor of the Mozambique Company, is at present in Europe taking a few weeks rest, after an uninterrupted sojourn of two years in Africa. Shortly before his departure he completed a tour of inspection throughout the company's possessions up to the eastern frontier. In the report, dated November 26, he has presented to the board of directors in Lisbon relative to this tour, after confirming the improvements made in the Beira Railway to Massi Kessi (since opened to Chimio), he says:—“After leaving the 75th mile post (starting from Fontesville) the country improves wonderfully. It is in many places suitable to agriculture, and the scenery is magnificent; in fact, the territory between the 90th mile post and Massi Kessi is the most attractive of all I have seen in Africa, not excepting the Transvaal. The commandant of Chimio, at Villa Barretto, is already comfortably installed in a well-built brick house. The natives of this region are submissive, and pay the hut tax with praiseworthy regularity. It is probable that in a short time—at the end of the present month—it will be possible to complete the journey of 614 kilometres between Beira and Salisbury in four days, which is a remarkable thing. Nova Massi Kessi is well situated. The workmen and offices of the company are still located in mud huts, but a brick house of sufficient dimensions is already in course of building. The neighbourhood of this new town abounds in waterfalls and reefs of gold-bearing quartz. Some specimens from various mines, which showed no trace of visible gold, were worked up in my presence, and, after washing, left gold estimated by experts at from ¼ ounce to 1½ ounce per ton. In conclusion, I am able to affirm that from the tour I have made I have carried away the conviction that this belt of the company's territory is destined to a most brilliant future.”

PAHANG CORPORATION.—Sungei Lembing, November 11: I hereby submit progress report for the month of October: Pollock's, No. 1 below adit. Winze A, east end of ore shoot, has been sunk an additional 3 feet, total below level 32 feet. At this point the water became so heavy that the miners could not sink any deeper. When the No. 2 below adit is advanced a distance on the lode, it may drain some of the water from this winze, when sinking can be resumed; and when the No. 2 drive reaches the point under the winze a rise can be put up to meet it. The lode in the winze is over 4 feet wide, and the whole width payable. For the 32 feet sunk we found the lode underlying at a much flatter angle, which I think has enabled us to reach the lode in No. 2 somewhat sooner than we expected. During the month a winze B has been started, and sunk to a depth of 10 feet. Ground had to be cut out on hanging wall side of drive to make room to sink the winze, so that it is not quite deep enough to cut the lode yet. The ore from the underhand stopes at the west end of short continues to yield well, the average for the past month being over 15 per cent. black oxide. The stopes over the level continue to yield fairly well. One party of tributors have broken through to the old adit level.—No. 2 below adit. The cross cut southward has been further advanced a distance of 24 feet, total from shaft 70 feet. At a point 63 feet from shaft a small lode formation was met with about 6 inches wide. The estimated distance to cut the lode was 85 or 90 feet, but considering the flatter grade at which the lode is underlying in winze A at No. 1 level I think this will prove to be the lode. It is carrying a good deal of copper and other minerals, and we have seen a slight trace of tin. Driving west has been started on it this month. The point where this formation was cut is about 95 feet east of winze A, at No. 1 level, so we have to drive 30 or 40 feet before getting into the shoot of ore.—No. 3 below adit. We have had some difficulty in locating the lode west of the cross course mentioned in last report. I continued driving west on the course of the lode a further 8 feet, following a mineral leader; but as I could see no improvement I stopped driving at that point. In the No. 1 level there were three distinct heaves in the lode, and each heave (going westward) was to the south or footwall side. I had already driven 4 feet on the crosscourse in that direction, and I decided to drive some distance further. I drove a further 24 feet, making the total from intersection 28 feet. At a distance of 15 feet some very good tin stones were met with in the crosscourse, but beyond this point the indications became unfavourable, and I ceased driving at the point reached (28 feet). Then I started driving northward, and at a distance of 8 feet we crossed what looked like the wall of the lode, and after driving a little further, I started driving westward on the above wall, and as it is carrying a little tin, I think we are on the right track at last. I may mention that for the few feet driven northward we got some very good stones of tin. I had a few tons put through the stamps during the month that came from the east side of crosscourse, and it gave a return of 7½ per cent. black oxide.—Drive east No. 3 level. This was started the latter part of the month, and a distance of 8 feet driven. The lode in the end at present is small, and is carrying a little tin. It may improve as we go eastward, as we are going under high and settled country.—Surface. The ore bin near the mouth of shaft will be finished in a week or two. A larger engine house has been built over and around the small one, and a boiler shed large enough for two boilers (when the second one will be required) has been erected, so that the work of erecting the new winding plant can be carried on under cover. The rainy season is giving the pump a little more work to do. We also find the water increasing a little in the workings as the ground is getting more opened up.—Jeram Batang. No. 1 above adit west has been advanced a further 22 feet, total from crosscut 234 feet. The lode in the end is 2 feet wide, and looks fairly promising. Early in the month a fresh splice of ground made on the hanging wall, from which we obtained some fair stones of tin, but only carried it along 10 or 12 feet, when it seemed to cut out.—(Signed) Wm. Straughan.

REGINA GOLD.—Manager reports under date January 5: No. 2 Kaiser (40 fathom level). Stopes are being actively worked, and some very good milling has been extracted. The ore is improving daily in these stopes. In the drive south-east the vein still holds, though much broken up with a series of small faults. In the north-west drive the vein is thin but much improved in quality. The country rock is rather harder, but looks very promising. After the Christmas holidays we shall be able to work straight away, and shall commence all work on contract, including crosscuts to Joseph and Caroli veins. About 10 tons of good ore are now ready for milling, which will be run through at first opportunity.

PUNJOM.—Managers report for October:—Mining. August shaft, 200 foot level. The main crosscut here has been ex-

tended 9 feet, making it 164 feet from shaft. The object of this further drive was to make quite sure the true hanging wall country had been reached, and this has been done, as the face is in pure country rock.—No. 2 east. This was discontinued during the earlier part of the month for reasons already given. It restarted on the 20th instant, and is now being driven into and through the black dyke for reasons which will be considered in a later part of this report. Distance driven 10 feet, total distance driven from main crosscut 85 feet.—No. 1 west. Owing to the heavy influx of water met with at this point, and the ground becoming very troublesome for driving, it was thought wise to discontinue work for a time so as to allow it to drain. Distance driven 4 feet, making it 33 feet 6 inches from main crosscut.—North crosscut off No. 2 east. The crosscut has been restarted at an angle to go out to strike the course of the north and south reef at a point about 30 feet north of the No. 2 east level. It will be continued till it reaches the dyke, when, if nothing is found to warrant further prospecting in this direction, we shall cease work there for the present at least. Distance driven 3 feet, making its total length 13 feet 3 inches from the No. 2 east level. The level I had just commenced at the date of my last report to go south, to show us if the course of the north and south reef had been reached, has been driven 28 feet, and fully proved that it had. The face is in lode formation, showing a deal of quartz, but, so far, it is of no real value. We shall continue this point still further south, and under where the good ore was worked at and above the 110 feet level.—Intermediate (150 feet) level. This point has been pushed on with all possible speed, so as to open up ground to supply the mill; distance driven 57 feet. We shall strike the east and west reef here during the coming month. The winze below the 110 feet level has been sunk the required depth, and is now ready for the intermediate level when it comes up to it. Depth sunk for the month 15 feet 6 inches.—No. 1 south, 110 feet level. This point has been extended 40 feet, and is now in 91 feet from shaft. Another two months, at the outside, should see this level out to the course of the north and south reef and under the point where payable ore was obtained some months ago.—Surface shaft No. 4. This is a little shaft to test the east and west reef near the big outcrop; its depth is 32 feet 6 inches. A small drive has been driven off this 11 feet, and I am pleased to say it is yielding fair quality ore for the mill.—Surface shaft No. 5. This was sunk for ventilating and filling up stopes; depth 21 feet.—Large stopes. These continue to give their usual quantity of ore for the mill.—Kladi. This is a new tunnel commenced in the early part of the month to test some rather extensive old native workings seen near the manager's house. At 79 feet from its mouth a small reef about 12 inches wide, and showing very fair quality ore, was met with. We did not open on it, but kept on with the tunnel, and after driving a few more feet another small reef about 6 inches wide was met with, showing ore of about 5 dwts. per ton. It increased in size till at the bottom of the tunnel it was fully 2 feet wide. Native workings were now met with, where, of course, the ore had been worked. We shall open out on these reefs directly, and in the meantime continue the tunnel out through the old workings till the main hanging-wall country is reached. I shall watch this point with much interest. Length of tunnel 115 feet. I am now commencing a tunnel to come in from the mill gully at a point 44 feet deeper, and 300 feet south of the Kladi Tunnel, which will give a complete section of the hill. This tunnel will go on under ground riddled with old native workings, and this brings me back to the east drive in the black dyke at the 200 feet level, mentioned in an earlier portion of this report. Of course, the plans will show you the workings at the August shaft, and I now send you plan and section showing the course of the ore ground under notice. I intend continuing the east drive at the 200 feet level out to intersect this course, and so test it at that depth (300 feet) from the outcrop. The distance to be driven will be about 250 feet, but as the ground will be fairly good for driving, this should not take very long.—Cyanide works. The excavations for this are well in hand, and a great part of the timber is on the ground. The plant is on its way up river, and should soon be here.—Milling. This was carried on during 27 days, crushing 1340 tons—viz., from mine 655 tons, and from headings 684 tons, for a yield of 336 ounces 9 dwts. The usual work, coming under the head of “General,” has had attention. The health of the camp continues good.

PESTARENA.—W. Henwood Trelene, January 3: The 46 east has been temporarily suspended. The 55 east is carrying a compact branch of pyrites about 20 centimetres wide, yielding 2 tons of ore per fathom, at 1 ounce 10 dwts, per ton. The 70 east is stopped for the present, and the men put to continue the crosscut north that intersected the A and B lodes. The 70 east on branch canter has been resumed, being one of the points mentioned in this year's programme. The 90 east is suspended, the men being required for stoping. The 90 west now yields 3 tons per fathom, at 1 ounce 10 dwts; the dip has commenced to change to the north similar to the lode in the 70 west, when the improvement took place. In the 140 west, on No. 5 lode, the lode has become much harder, and is at present carrying no ore to value; but it is well defined, and looks promising.—Crosscuts. The 55 and 70 are without change. The 90 south has passed through a branch 30 centimetres wide, but is carrying no ore at that point. In the 130 north the end is much mixed with quartz, and seems to be bearing a lode.—Stopes. On counter lode. At the 55 east one stopes gives 5 tons per fathom at 15 dwts; at the 100 east, 7 tons at 1 ounce 10 dwts; 120 east, 3 tons at 15 dwts.—On No. 1 lode. At the 55 east two stopes yield 5 tons at 2 ounces, and 10 tons at 2 ounces respectively. Two stopes at the 70 east yield 6 tons at 2 ounces, and 8 tons at 2 ounces respectively. At the 70 west a stopes is producing 5 tons per fathom at 1 ounce 10 dwts. An intermediate drive from the 90 stopes to open up further stoping ground is yielding 4 tons per fathom at 1 ounce 15 dwts, per ton.—Stabioli. The crosscut from the Morghen adit has passed through a small branch of quartz, but is again in gneiss. In the Anza level north the lode averages 75 centimetres wide, and is much mixed with graphite and fine pyrites. It is carrying good walls, and seems to be bearing another ore shoot.—Kint. The Guja adit has intersected a small vein about 1 inch thick, assaying 1 ounce 10 dwts. The winze under the Quarazza adit has been sunk 26½ metres, and having reached the water, has been suspended. On the Oro Secco end west (formerly called Lanti workings) the lode is 1-30 metre wide, carrying 1 metre of quartz, mixed throughout with low grade ore, estimated to yield 6 tons per fathom at 8 dwts; during the month assays have given 11 dwts, per ton.—Machinery. A cog-wheel of one of the lower mills broke during the month, but has been replaced without causing serious delay. Owing to heavy gales and intense cold, the water supply is decreasing.

SUTHERLAND REEF.—The following is a copy of manager's report, dated December 13: West drive, 210 feet level, 10 feet have been driven, making a total of 150 feet; the reef carrying payable quartz.—Winze. 210 feet level west has been sunk to 32 feet, the reef at bottom being about 39 feet wide.—East drive, 210 feet level, 10 feet have been driven, making a total of 125 feet. The reef is very good here; a streak of quartz on the footwall side, about 4 inches thick, being very rich indeed.—Battery. Good progress has been made during the week. The engine has been placed on its foundation, and the two boilers will be in their places to-day. The mortar boxes are in place, and all the heavy timbers. In a day or two we shall commence panning the ore bins and battery shed.

SPITZKOP FARM.—Summary of work done at the mine during the month of November: Driving 297 feet, total 1290 feet 6 inches; stripping 484 feet, total 1533 feet; reef broken after stripping 548 feet, total 1466 feet; ore brought to grass for month 550½ tons, total 1850½ tons.—Assays of ore. 243½ tons, average assay 13 dwts, 10 grains fine gold; 50 tons, average assay 14 dwts, fine gold; 54 tons, average assay 11 dwts, 10 grains fine gold; 30 tons, average assay 9 dwts, fine gold; 173 tons unassayed; total, 550½ tons.

WENTWORTH EXTENSION.—Report, dated December 1: East crosscut 150 feet level extended 8 feet, total length 254 feet. No change. Main north-west drive from the alluvial shaft extended 17 feet, total length 235 feet. Gravel continues about 18 inches thick.



**ALAMILLOS.**—Mine report, dated January 2: In the 85 fathom level driving west of Taylor's shaft the lode is small and without value. The lode in the 160 west of the same shaft is large and strong, containing stones of ore, and is valued at  $\frac{1}{2}$  ton per fathom. In the 100 east of Judd's engine shaft the lode is small, and the granite is very hard. Carillo's winze has been temporarily suspended, owing to an influx of water. Sinking will be resumed as soon as the winze is drained by the 160 fathom level passing under it. The stopes continue to yield well. The works at surface are kept on very regularly, and the machinery is in good working condition. Estimated raisings for January, 250 tons. The tributers returned 351 tons of mineral in the past month.

**ALMADA AND TIRITO.**—Report for fortnight ending Dec. 8: Dios Padre. The lode in the 250 feet level driving north has undergone no change during the past fortnight. It is large and well defined, but is without ore. The lode in the 250 feet level driving south has fallen off in value, but maintains its size, and is of a promising character. The stopes are very variable, yielding at present fair quantities of good grade ore.

**ARGENTINE CONCESSIONS.**—The directors have issued a circular embodying a report by Mr. Doering, the expert sent out to report on the property, and who gives a highly favourable account of the Carolina Mine. Mr. Doering states that if the pyrites can be treated by the cyanide process, the cost of gold reduction will be very much reduced, and the low grade ores left by the old company can be made available for profits, as when this property was in the hands of the late company the valuable nature of the gold recovery process was not sufficiently advanced to be of active use to mining companies. With the alluvials nothing has yet been done save the careful working by hand labour of a small area to test value, with most satisfactory results, and monthly returns of gold from this source are promised. With the 30 head of stamps on the spot, the value of any discoveries can be readily tested, and it is intended that this company shall be a founders' company, and that as soon as any property under its control shall have been proved to be valuable, it will be separately organised, and for this purpose working companies will be formed, and such capital as it may be desirable to raise will be offered for public or private subscription, as the directors may consider most advisable.

**AUSTRALASIAN MINING.**—Fortnightly report of Mr. John James, manager, dated November 24: On the 6th November we took possession of the ground known as the No. 2 North Smithfield Gold Mining Company. There was a shaft sunk in the western corner of the ground to a depth of 107 feet. Your directors and I came to the conclusion to stop further operations in it, as the size of the shaft was not suitable for deep sinking, so you will see by the plan that was sent you the shaft is being sunk in the centre of the ground. There were five men employed to hold the ground for seven days until a contract was let for sinking 250 in the new shaft. This was let on November 13th, and they started to sink on the 14th. Since then they have sunk 31 feet, and timbered 25 feet 6 inches. The size of the shaft is 3 feet in two chambers, the third chamber is 4 feet by 3 feet 3 inches clear. In the sinking there will be set-off put in every 18 feet, with 6-inch frames to carry lifts if required. These set-offs will be 3 inches by 16 inches high. The reason we are sinking a three chamber shaft is because we might have a very heavy soaking of water at a depth. We have erected a small storeroom; so far the contractors are giving satisfaction. Since writing the above the contractors cut quartz 6 inches thick underlying very flat to the east.

**BAYLEY'S REWARD.**—Mining report dated November 17: Sylvester shaft has been sunk a further depth of 6 feet, total now being 300 feet from base. Lode is now slightly to the east of shaft, consequently shaft will in future be in country rock.—North drive. The north drive has been driven 11 feet in an easterly direction, following the fault, but up to the present no important change.—Gordon shaft. The No. 1 intermediate north of Gordon's shaft has been driven 4 feet, total 82 feet. At present preparing for putting in the necessary timber.—Stopes. Stopes in the bottom of the intermediate show no particular change.—Bogelhole shaft. North drive has been driven 6 feet, total 20 feet. At this point we have apparently got to the end of the stone, where it breaks off towards Cockshott. Above the drive there is still a good quantity of fair grade stone to be taken out. South drive is at present 16 feet, being driven 10 feet for the week. Lode looks very well indeed, and has returned during the week some very rich stone both in ironstone, and the solid white quartz.—Everard shaft. North drive has been advanced 8 feet, total 158 feet; still carrying portion of the lode, but no particular change.—Stopes. Stopes continue to yield stone of fair grade, lode being from 3 to 4 feet wide.—Air shaft. South drive driven 5 feet, total 35 feet. Lode 18 inches wide; but this I believe to be only a portion of the stone, the remainder being in the hanging wall side, with a portion of intrusive rock between.—Cockshott shaft. North drive has been driven 11 feet, full length 86 feet. This will shortly be connected with the south drive from the air shaft. Lode is from 3 to 4 feet wide.—Stopes. Stopes have yielded some very fair stone. Portions of ironstone containing very good gold indeed. Mr. Calloch's shaft has been sunk 5 feet, total 22 feet; now in solid lode matter, which is a continuation of the Big Bow.—Machinery. Since last report have done a considerable amount of work towards the building—such as enclosing the sides, also flooring the battery house; also made the boiler stack 18 feet higher, which has improved our steaming power very much, and enables us to work the 20 stamps when sufficient water can be procured, which we have been doing this week, but the loss of time is very great.—Crushing. During the week there has been crushed 131 tons of stone, 7 cwt. from strong room. Yield, 700 ounces of gold.—Gold Dispatched. On the 16th there was dispatched by escort 1402 ounces of bar gold, as advised by wire.—M. H. Matthews.

**BAYLEY'S REWARD No. 1 SOUTH.**—Mining report dated November 17:—Main shaft (Gorrie's). The main shaft since last report has been sunk 5 feet, full depth now being 130 feet from surface. Ground is still rather hard and difficult to work.—No. 2 shaft. No. 2 shaft has been sunk 10 feet, total 76 feet, leaving about 15 feet still further to sink to connect with the south drive from No. 1 shaft.—No. 2 shaft (Bayley's line). A contract has been let to sink the No. 2 shaft a further depth of 70 feet at £1 15s. per foot, which is a low price. They started work yesterday, and I hope will be able to complete the contract for the price named.—Machinery. The work in connection with the machinery and building is being continued, and making good progress. I hope a larger supply of water will shortly be obtained, otherwise we shall have to construct tailing pits similar to Bayley's Reward. During the week the battery pump and pipes have arrived on the mine.

**BRITISH BROKEN HILL PROPRIETARY.**—Mining manager's report for the week ending November 23: Backwood (No. 1) Shaft. 150 feet level. North drive off east cross cut driven 14 feet, total length 18 feet. Face in carbonate ore, with patches of mullock. South drive just started off east cross cut extended 16 feet. Face showing fair grade lead ore, with patches of mullock. We broke in driving 47 tons; average 44 per cent. lead and 6 ounces silver per ton.—Howell (No. 2) Shaft. 300 feet level. North-east drive lengthened 6 feet, making total length 82 feet. Face in hard sulphides, mixed with garnet sandstone.—Marsh (No. 6) shaft, second level. No. 3 east cross cut driven 13 feet, total length 108 feet. Face in country rock. Uprise in end of south drive off No. 3 east cross cut risen 6 feet, total height 14 feet. Roof showing carbonate ore somewhat mixed with sulphides. We broke 15 tons, averaging 32 per cent. lead and 30 ounces silver per ton. Are stopping carbonate ore south of uprise in north drive. Face looks favourable. We mined 4 tons; average 21 per cent. lead and 61 ounces, and 14 tons 21 per cent. lead and 37 ounces silver per ton. North stopes over back of main south drive is rather patchy at present. We broke 8 tons; average 32 per cent. lead and 27 ounces, and 3 tons 30 per cent. lead and 12 ounces silver per ton. Stopes down winze are unchanged. Have started stopping operations in bottom of this stopes again. We broke 39 tons; average 27 per cent. lead and 43 ounces, and 17 tons 30 per cent. lead and 12 ounces silver per ton.—Retailick's workings. East cross cut off north drive, at point 40 feet in from Retailick's winze, driven 11 feet. Face mullocky. We broke 11 tons; average 87 per cent. lead and 13 ounces silver per ton.—115

feet level. We broke 16 tons; average 33 per cent. lead and 27 ounces silver per ton along the western side of No. 2 north-east drive. The assays for the week vary from 14 to 50 per cent. lead, and from 4.2 to 163.30 ounces silver per ton.

**CRAYEN'S CALEDONIA.**—The following fortnightly report has been received from the mine, dated Charters Towers, November 22: In the underhand stopes from No. 9 level the reef will average about 10 inches. In the three stopes over No. 9 level the reef will average 7 inches. The level on the fault in No. 8 has been extended a further 27 feet, making a total of 51 feet from the starting point. There have been bunches of quartz coming in the last 12 or 15 feet, which I think will in time form into the western line of reef, as it is gradually crossing the face, and showing good mineral. The haulage of quartz is 30 tons for the fortnight, making a total of 67 tons in the paddock. At the Victoria and Queen shaft: the 603 feet level has been extended a further 11 feet, making a total of 89 feet from the straight shaft, which completes this drive. I started a rise at the end of the drive on the 19th inst., and it has been worked 7 feet. The ground is fairly good. The eastern level on the Victoria and Queen reef has been extended a further 5 feet, making a total of 62 feet from the boundary peg; the reef is about 1 foot thick. In No. 1 stopes over the reef is about 10 inches thick; No. 2 a little smaller, and the next two 10 inches. From these workings we have raised 40 tons of quartz for the fortnight, making a total of 76 tons in the paddock. Everything at the mine is working satisfactorily.

**CHAMPION REEF.**—Fortnightly report of Captain James Rowe, superintendent, dated December 19: Garland's shaft. This shaft has been sunk 11 feet 6 inches, total depth 836 feet. Lode improving in size, is now 2 feet wide, assaying 1 ounce 19 dwts. 6 grains of gold per ton. The 740 feet level north of shaft has been driven 34 feet 6 inches, total length 199 feet 6 inches. Lode 5 feet wide, assaying 2 ounces 8 dwts. 4 grains of gold per ton. 740 south driven 36 feet, total length 162 feet 6 inches. Lode 1 foot 6 inches wide, assaying 2 ounces 12 dwts. of gold per ton. The 630 feet level, north of west crosscut, driven 32 feet 9 inches, total length 392 feet 3 inches. Lode not so large, is now  $1\frac{1}{2}$  foot wide, assaying 2 ounces 2 dwts. 10 grains of gold per ton. The 530 feet level north of west cross cut driven 26 feet 6 inches, total length 860 feet 9 inches. Lode 2 feet wide, assaying 2 ounces 1 dwts. 19 grains of gold per ton. No. 7 rise in back of level risen 12 feet 6 inches, total height 20 feet 6 inches. Lode 5 feet wide, assaying 1 ounce 15 dwts. 15 grains of gold per ton. No. 3 winze below level sunk 7 feet, total depth 12 feet. Lode 24 feet wide, assaying 1 ounce 18 dwts. 4 grains of gold per ton. The 440 feet level north of west crosscut driven 32 feet 6 inches, total length 790 feet 3 inches. Lode smaller, is now  $1\frac{1}{2}$  foot wide, assaying 2 ounces 8 dwts. 6 grains of gold per ton. We have suspended the driving of this end for a short time, and have started to rise in back of level to effect a communication with 340 feet level south of Ribblesdale's shaft. No. 6 rise in back of level risen 18 feet, total height 29 feet 6 inches. Lode 24 feet wide, assaying 1 ounce 18 dwts. 7 grains of gold per ton. No. 5 rise in back of level risen 11 feet 9 inches, total height 89 feet 9 inches. This is communicated with 340 feet level north of west crosscut. No. 5 new winze below level, 100 feet north of No. 4 has been sunk 7 feet. Lode 24 feet wide, assaying 1 ounce 10 dwts. of gold per ton. No. 4 winze below 340 north of west crosscut has been sunk 6 feet, total depth 90 feet. This is communicated with 440 north.—Ribblesdale's shaft. The 540 feet level north of shaft has been driven 25 feet 6 inches, total length 277 feet. Lode 9 inches wide, assaying 1 ounce 9 dwts. of gold per ton. 540 south of shaft driven 22 feet 6 inches, total length 97 feet 3 inches. Lode 6 inches wide, assaying 1 ounce 6 dwts. 2 grains of gold per ton. 440 level south of crosscut, east of 440 south of shaft has been driven 24 feet, total length 109 feet 6 inches. Lode 24 feet wide, assaying 1 ounce 13 dwts. 16 grains of gold per ton. Rise in back of level risen 20 feet, total height 38 feet. Lode 3 feet wide, assaying 1 ounce 3 dwts. 16 grains of gold per ton. Incline winze below level sunk 24 feet 6 inches, total depth 72 feet. Lode 34 feet wide, assaying 1 ounce 15 dwts. of gold per ton. The 340 feet level south of crosscut east of 340 south of shaft has been driven 22 feet 9 inches, total length 102 feet. Lode 2 feet wide, assaying 1 ounce 3 dwts. 12 grains of gold per ton. 340 north of crosscut driven 4 feet 3 inches, total length 109 feet 9 inches. Lode 1 foot wide, assaying 1 ounce 2 dwts. 10 grains of gold per ton. Incline winze below level sunk 22 feet 6 inches, total length 26 feet 3 inches. Lode 34 feet wide, assaying 1 ounce 18 dwts. of gold per ton. No. 2 rise in back of 340 south risen 16 feet, total length 112 feet 9 inches. Lode 1 foot wide, assaying 17 dwts. 4 grains of gold per ton. New winze below 340 north of crosscut sunk 4 feet 9 inches. Lode 1 foot wide, assaying 15 dwts. 10 grains of gold per ton.—Carmichael's shaft. We are still engaged bringing down this shaft to the lode at the 440 feet level, and hope soon to complete same. The 315 crosscut west of shaft has been driven 9 feet 3 inches, total length 625 feet 6 inches. We have suspended the driving of this for a short time, and have put the men to drive south of the quartz intersected some time ago. The level has been driven south of cross cut 8 feet 6 inches. Branch of quartz 3 inches wide, assaying 15 dwts. 6 grains of gold per ton.—Rowe's shaft. We have resumed the sinking of this shaft, which has been sunk 4 feet 6 inches, total depth below 415 feet level 4 feet 6 inches. Lode 2 feet wide, assaying 2 ounces 6 dwts. of gold per ton. The 415 north of shaft has been driven 20 feet 6 inches, total length 70 feet. Lode  $1\frac{1}{2}$  foot wide, assaying 2 ounces 1 dwts. 8 grains of gold per ton. 415 south of shaft driven 8 feet, total length 50 feet. This is communicated with 415 north of winze sunk below 315 south of shaft. The 315 north of winze driven 7 feet, total length 34 feet 6 inches. Communicated with 415 south of shaft. 415 south of winze driven 7 feet, total length 7 feet. Lode  $1\frac{1}{2}$  foot wide, assaying 15 dwts. 4 grains of gold per ton.—Stopes. These throughout the mine are yielding their usual quantities of quartz. The size and value of the lode in the different stopes will be given in the next report.

**CUMBERLAND GOLD.**—Cumberland, North Queensland, Nov. 4. I beg to submit my report for the month of October: No. 5 level north. A contract was let during the month to drive this level at 30s. per foot. The contractors have now completed the 50 feet. For the first 30 feet driven the country met with soft, the formation showing no stone. In the last 10 feet, however, traces of quartz have been visible in the formation. From the indications I think we are not very far from the reef, but judging from the dip of the reef in No. 4 level, I do not expect to strike the reef in No. 5 level until we have driven a little further. It is my intention, as mentioned in a previous report, to drive an intermediate level between Nos. 4 and 5 to closely follow up the reef struck in No. 4 level north. Owing to nearly all available men being required for repairing the dam, I am unable, at present, to carry out all the prospecting I desire in the north end, but hope in a week or to let contracts for further driving, &c.—(Signed) Anthony Gallagher.

**CAPE COPPER.**—Ookiep Captain Henwood, Nov. 30: The 130 fathom level east of north crosscut is yielding stones of copper ore, but not to value. The rock in the 105 fathom level (No. 8) south-east of No. 46 winze not being very favourable for copper ore, it has been suspended, and the men are put to resume the 58 fathom level (No. 1) west of old shaft to further prove the ground in that direction; the present forebreast is in massive quartz. The stopes in the 92 fathom level north from bottom of No. 1 sink south-east of 42 winze is producing 7 tons of copper ore per cable fathom. We are carrying all the width of the productive ground at this point (so far as we can see), which is about 9 feet wide, and the deepest part is (up to the present) 4 feet below the 92 fathom. No. 2 sink in bottom of stopes in back of 92 fathom level south-east of 42 winze is communicated with the 92 fathom crosscut. The productive ground held down in the sink for a depth of 14 feet from point of starting. The 92 fathom crosscut (No. 19) south of main east level has been temporarily suspended, and the men are put to drive west in the 92 fathom crosscut south of 46 winze to prove the branch of copper ore passed through in that driving situated about 21 feet from the extreme end, or opposite the present east level. The rock in bottom of sink below the intermediate level between the 80 and 68 fathom levels having become entirely unproductive, sinking has been sus-

pended, and the men are put to drive south-west in the intermediate level, back about 6 fathoms, from the extreme forebreast, to prove the ground in that direction. The 48 fathom crosscut north of main east level is still spotted with copper ore throughout, but not sufficient to value. The stopes in the 92 and upper levels are yielding their usual quantities of copper ore.—Trial Mines. Captain Henwood, November 30: Nababess south. The 74 fathom level south-east of shaft is still spotted with copper ore. The rock in No. 2 winze sinking below the 59 fathom level presents occasional specks of copper ore. We have about 4 feet more to sink, to make it deep enough for the 74 fathom level.—Spectakel. The winze sinking below the stopes in back of 27 fathom level, for the present is only yielding  $\frac{1}{2}$  ton of copper ore per fathom.—Copperberg. The winze sinking below the adit level east of whim shaft is yielding  $2\frac{1}{2}$  tons of copper ore per fathom. The stone in back of adit level east of No. 1 south crosscut is worth 2 tons of copper ore per fathom.—Ookiep east. The stopes in bottom of 66 fathom level around winze is producing its usual quantity of mineral for the smelting works.—Returns for November. Ookiep, 2150 tons of 19 per cent. Spectakel 145 tons of 29 per cent.—Arrival at Port Nolloth. The s.s. German.—Arrival at Swansea. The s.s. Osmanli, with 1350 tons of ore, and 1160 tons of regulus.—Tilt Cove. East Mine. Output for November. 5080 tons of 3.50 per cent. wet assay.

**COROMANDEL.**—Superintendent's report for fortnight ending, December 15: Coromandel shaft, 420 feet level north. This has been driven during the fortnight 23 feet 6 inches, and its total distance from shaft is 496 feet. The lode is still very small and poor.—Rise back 420 feet north. Progress for fortnight by hand labour, 2 feet. Size lode, 1 foot 6 inches, value 10 dwts. per ton. Winze bottom 320 feet north sunk 8 feet 6 inches, total 41 feet 6 inches below level. Lode in bottom 1 foot wide, assaying 8 dwts. per ton.—210 feet crosscut west. This drive has been resumed from end of former crosscut west of shaft, and is being continued with the object of proving whether any part of the lode remains standing in that direction. Progress for fortnight 15 feet 3 inches, total length from shaft 49 feet.—Prospect shaft. 500 feet level north. The winze in bottom of this level has been sunk by hand labour 7 feet 6 inches, making its total depth 16 feet. The lode carries a good deal of quartz, but is rather broken and irregular in present bottom. Assays from this winze average 8 dwts. per ton.—500 feet crosscut west. This has been extended a further 17 feet 3 inches, and is now 239 feet from shaft. No change since last report. 440 feet level north of crosscut east driven 17 feet, total 49 feet. Lode in end 1 foot wide, assaying 15 dwts. of gold per ton.—440 feet level south of crosscut east. This end, after advancing a further 20 feet, has intersected the dyke. Drivage has, therefore, been suspended and the drill started to rise above back of level, immediately south of crosscut. Lode at south end 1 foot 6 inches wide, worth 1 ounce 8 dwts. Lode in rise, at 6 feet above level, 2 feet 6 inches wide, assaying  $\frac{1}{2}$  ounce of gold per ton.

**FORTUNA.**—Mine report dated January 2: Canada Inco Mine. In the 110 fathom level driving west of San Pedro's shaft the lode is small and without value.—Los Salidos Mine. In the 200 east of Taylor's engine shaft the lode is large and strong, but has greatly diminished in value, estimated at  $\frac{1}{2}$  ton per fathom. The 103 east of Palgrave's shaft turns out good lumps of ore occasionally, and looks more favourable.

**GELDENHUIS ESTATE AND GOLD.**—Summary of operations for November:—Quartz mined 10,101 tons of 2000 lbs., quartz milled (80 heads) 10,056 tons of 2000 lbs., yielding smelted gold, 3637.82 ounces, valued at £12,911 7s.; concentrates sold, say 267 90 ounces, valued at £527 9s. 6d.; tailings treated, 14,396 tons, 2895 19 ounces, valued at £264; gold slags sold, 4150 ounces, £119 4s. 4d.; total, £22,822 0s. 10d. Cost £7272 7s. 2d., mining and hauling 8s. 9d., transport 70d., milling 4s.; total, 13s. 5d.; charges, 11d.; total, 14s. 5d. Expended on mine development 6s. 5d., cost of treating tailings 4s. 4d.; total, 25s. 3d. Profit for the month £9109 1s. 2d.—Capital account. Expended on machinery, new shafts, &c., £4192 6s. 3d. Number of feet driven and sunk during month, 8014 feet. The ore developed for the month amounted to 18,960 tons.

**GOLD FIELDS OF MYSORE.**—Fortnightly report on prospecting operations, dated December 15: West Balaghat block. No. 1 shaft. The 117 feet level north has been driven 5 feet 6 inches, total distance 125 feet 6 inches. The quartz is 15 inches wide, and assays 16 dwts. of gold per ton. The south level has been driven 4 feet 3 inches, total 114 feet 9 inches. The quartz is 2 feet wide, and assays 1 ounce 2 dwts. of gold per ton.—No. 2 shaft. The 100 feet level north has been driven 4 feet 6 inches, total distance 116 feet 5 inches. The quartz is 15 inches wide, and assays 10 dwts. 5 grains of gold per ton. The south level has been driven 4 feet 9 inches, total distance 128 feet 6 inches. The quartz is 12 inches wide, and assays 12 dwts. 2 grains of gold per ton.—No. 3 shaft. This has been sunk 3 feet 6 inches, total depth 129 feet 10 inches. The quartz is 15 inches wide, and assays 14 dwts. of gold per ton. The 117 feet level north has been driven 5 feet, total distance 52 feet 6 inches. The quartz is 15 inches wide, and assays 6 dwts. 4 grains of gold per ton. The south level has been driven 6 feet, total distance 119 feet 6 inches. The quartz is 18 inches wide, and assays 12 dwts. 8 grains of gold per ton.—No. 4 shaft. The 148 feet level north has been driven 4 feet 3 inches, total distance 37 feet. The quartz is 3 inches wide, and assays 8 dwts. of gold per ton. The south level has been driven 3 feet 9 inches, total distance 29 feet 6 inches. The quartz is 2 feet wide, and assays 12 dwts. 8 grains of gold per ton.—Road block, North shaft. The north level from bottom of shaft has been driven 4 feet 6 inches, total distance 46 feet. The quartz is 18 inches wide, and assays 8 dwts. 2 grains of gold per ton. The south level has been driven 12 feet, total distance 58 feet 6 inches. The quartz is 9 inches wide, and assays 5 dwts. of gold per ton.—No. 3 north of No. 2. The level south from bottom of this shaft has been driven 10 feet 6 inches, total distance 130 feet 6 inches. The quartz is 1 foot 9 inches wide, and assays 7 dwts. 8 grains of gold per ton.—Ajnapalli block. The shaft in trench has been sunk 5 feet, total depth 71 feet. The lode is 1 foot 6 inches wide, and assays 3 dwts. 8 grains of gold per ton.

—Mine report for fortnight ending December 17: Oriental lode, south shaft. Owing to our being engaged in cutting plat at 470 feet level very little has been done in driving on the lode. The 470 feet level north of shaft has been driven 1 foot 4 inches, total distance 150 feet. Lode 12 inches wide assaying 15 dwts. of gold per ton. 470 feet level south driven 2 feet, total distance 167 feet 10 inches. Lode 24 feet wide carrying 16 inches of quartz, assaying 1 ounce 11 dwts. 6 grains of gold per ton. The 380 feet level north has been driven 1 foot 4 inches, total distance 245 feet 11 inches. Lode 9 inches wide, assaying 8 dwts. 14 grains of gold per ton. 380 feet level south driven 5 feet 2 inches, total length 257 feet. Lode 3 feet wide, carrying 9 inches of quartz against the hanging and 12 inches on the footwall, assaying 19 dwts. 12 grains of gold per ton. The 280 crosscut east has been driven 7 inches, total distance 295 feet 9 inches. Owing to such slow progress being made we have decided to stop this crosscut until the rock drills are at work.—Machinery. We are pushing on with the erection of this as fast as possible.

**HAURAKI.**—Captain W. H. Arga'l writes to this company on November 28: The pumping engine has started without a hitch of any kind, and the shaft is down to the limit of the tributers' take. Everything has been properly surveyed, and I hope, two or three weeks from now, to have opened out a crosscut to the No. 2 reef, and when intersected I have every reason to believe we shall get a large quantity of the precious metal. Some of the tributers have been doing well. Those in No. 15 block on the No. 2 reef obtained the magnificent return of 1093 ounces 6 dwts. of melted gold from 18 tons of general quartz, and 263 lbs. weight of specimen stone. I am more confident than ever that the future of the company is assured.

**KEMPINKOTE.**—Fortnightly report of Captain D. H. Williams, mine agent, dated December 17: Garland's shaft has been sunk 11 feet 10 inches, total depth 273 feet 10 inches. There is no alteration in the ground in the bottom of the shaft. 245 crosscut has been driven 12 feet, total distance from shaft 48 feet. The ground in the end is mixed. On Saturday, December 15, we put a



machine to drive this crosscut. 183 north drive has been driven 26 feet 6 inches, total distance from crosscut 177 feet 6 inches. On Saturday, December 15, this drive was communicated with Henty's 173 south drive. This has thoroughly ventilated the mine, and has shown a very good footwall about 100 feet in length, the lode upon it being the full width of the drive, and I am pleased to say it has a permanent appearance, assaying 5 dwts. of gold per ton of stuff. 183 south drive, No. 3 west crosscut, has been driven 27 feet, total distance from level 36 feet. About 32 feet from the level a seam of white quartz was met with about 9 inches wide, which was very poor, surrounded with a very soft schist, its bearing being due west. Beyond this, this crosscut entered country rock. We have suspended the drive for the present, and have started to crosscut east about 6 feet from the end of main drive to see what there may be in that direction. No. 1 winze has been sunk 7 feet, total depth 24 feet 6 inches. The lode in the bottom is the full width of the winze, assaying 34 dwts. of gold per ton.—Henty's shaft. During the past fortnight we have put in about 20 feet of bucket road, a set of stays around the lift, and have sunk 8 feet 9 inches, total depth 238 feet. There is no change in the bottom of the shaft. Tomorrow we shall put a machine to drive north of the bottom of this shaft, cut a flat, make room for a winch, &c., preparatory to driving a crosscut east, which will impede our sinking for a time. 173 north drive has been driven 6 feet 6 inches, total distance from shaft 26 feet 6 inches. Lode matter in the end the full width of the drive; very poor. 173 south drive has been driven 25 feet 6 inches, total distance from shaft 282 feet 6 inches. At this point it was intersected by Garland's 183 north drive. The lode assays 4 dwts. of gold per ton of stuff. Our coolies are now engaged in cleaning up the level and making a drain to carry the water from Garland's to Henty's, which we hope will be complete in a few days, when we shall stop the top bucket in Garland's shaft.—Machinery. We have put the new 12½ by 18 inch cylinder winding engine to work at Henty's shaft. The third Cornish boiler is being built in. Our pitwork and surface machinery are in good working order.—Health. The health of the camp is very good.

LOMA.—The mine superintendent reports under date Dec. 6, as follows: Operations. On the 28th November we cleaned up the sluice and got 160 ounces of amalgam. As we intend to lay the sluice at head, we are cleaning down thoroughly the ground cut, and the proceeds we will add to the clean-up before melting the bar.—Soto Mine. We are now running in this mine, and the gravel looks good, and we are washing plenty of it away. We will clean up in this mine in about a month's time.—Reservoir. The ramming of the reservoir with earth is being proceeded with, and we are using every endeavour to get this work completed as soon as possible.—Ditch is behaving well, and we have had no trouble with it lately.

LA YESCA.—Captain Mitchell reports on December 5: San Miguel Mine. Distance driven during the past fortnight 15 feet 2 inches. Total drive 685 feet 5 inches.—Major shaft (alluded to in previous report). This is being cleared and retimbered. From present appearances we shall not be long before we reach the back of the old San Miguel workings, when I believe rich ore in large quantities will be found.—Will's vein. The drive on this vein is being extended, and the progress made leaves no cause for complaint. The lead of the vein is getting more to the north, which I consider to be a good sign, and when a further extension is made it will no doubt form a junction with that part of the vein where little extension has been done, and when effected it is probable that a great improvement will be met with. Distance driven during the past fortnight 11 feet 9 inches.—Zapopan. On Saturday last the men cleared the choke in the tunnel, and on going through I found the shaft about 120 feet further, and the tunnel for that distance requires repairing. The men are now clearing and repairing the Despacho workings. The following assays are of ore broken from different parts of the vein, and are the most important assays that I have been able to send you. No. 1, 68 ounces silver per ton of 2000 lbs.; No. 2, 126 ounces silver per ton of 2000 lbs.; No. 3, 97 ounces silver per ton of 2000 lbs.—Machinery. The erection of the machinery is nearly completed. All other work is going on as usual, and although the San Miguel gold-bearing vein is not yet intersected, I am glad to say the prospects of the mines are of the most encouraging nature, and if only a little patience is exercised, I have not a doubt that it will be amply rewarded. [Having received from Captain Thomas Mitchell a letter in which he expressed his desire to return to England, the directors endeavoured to obtain the services of a fully-qualified gentleman to take over the management of the mines. As a result of most careful consideration Mr. C. E. Winwood Smith, A.M.I.C.E., was appointed, respecting whose suitability for the post, in every respect, the directors had ample testimony. Mr. Winwood Smith left in the s.s. *Auroras* on the 29th ultimo, and will take over the charge of the mines from Captain Mitchell.] Captain Mitchell reports that satisfactory progress is being made with all the work at the mines. The character of the ore at the Zapopan is free milling, and will work in the pans without roasting. These workings are of great extent, and from what he has seen he is convinced that the vein must have produced large quantities of rich ore almost from the surface to its present depth, a conclusive proof of its being an extraordinary deposit of mineral.—San Miguel tunnel. There is every indication that he is close to the gold bearing vein.

LINARES.—Mine report dated January 2: Pozo Ancho mine. In the 200 fathoms level driving east of No. 276 winze on Warne's lode, the granite is hard and the lode is unproductive. The lode in the 200 west of that winze on Warne's lode, is more open than it was and looks promising. The 178 west of Warne's crosscut, is valued at 1½ ton per fathom. This is a large strong lode and is easy for driving through. In the 200 west of Nell's engine shaft the lode

continues regular and contains some stones of ore. The lode in the 155 west of the same shaft, continues regular and compact, and is estimated at 1 ton per fathom. The stopes continue to yield well. Surface works are kept on very regularly and the machinery is in good working order. Estimated raisings for January 200 tons. The tributary returned 106 tons of mineral in the past month.—Los Quintos Mine, Taylor's engine shaft. In the 185 east the lode is changeable, but occasionally turns out good stones of ore.—The lode in the 165 east has slightly declined in value and is now estimated at 1 ton per fathom. In the 150 east the lode turns out good lumps of ore. The lode in the 130 east is small and unproductive.—Benito's winze, sinking below the 165 fathoms level. This is going down through a splendid lode, worth 2 tons per fathom. Estimated raisings for January 150 tons. The tributary returned 49 tons of mineral in the past month.

MAY CONSOLIDATED.—The directors beg to submit the following report for the month of November:—Mine. Number of tons of ore mined 6500 tons, number of feet risen, driven, and sunk 676 feet.—Battery. Number of stamps at work 50, actual time running 29½ days, ore milled 6500 tons, yield (smelted gold) 2200 ounces 15 dwts., average yield per ton 6.77 dwts., average crushed per stamp per day 4.37 tons, value of gold won (say) £7977 14s. 4d.—Analysis of expenditure. Mining and raising 6500 tons cost £3881 6s. 1d., 11s. 11½d. per ton, tramming 6500 tons cost £185 15s. = 6s. 8½d. per ton; milling, &c., 6500 tons cost £1488 4s. 4d., = 4s. 6½d. per ton; development 6500 tons cost £770 17s. 4d., = 2s. 4½d. per ton; total £6326 2s. 9d., = 19s. 5½d. per ton; expended on construction, &c., £1831 16s. 6d.; expended on excess development, £1404 3s.; total £9565 2s. 3d.—Result. Gold won valued at £7977 14s. 4d.; expended, less construction, &c., £6326 2s. 9d., net total for month, £1651 11s. 7d.

MOUNT LYLE.—The London office has received the following report from the Melbourne board, for the week ending Nov. 22: Indicator winze, No. 3 tunnel. The winze has been sunk 3 feet, total 37 feet. The sinking still in copper pyrites of good grade—20 per cent. The thin vein of micaceous clay is still going down, and assays high for gold.—Rise over old winze, No. 4 tunnel. The rise has been put up 5 feet, total 79 feet. The pyrites wall is keeping more vertical than it has done for some time past. There is also an improvement in the gold contents of the vein of oxidised ore we are following.—50 feet south drive, engine shaft, No. 4 tunnel. The south drive has been advanced 4 feet, total 234 feet. The country driven in is hard schist rock.—No. 2 crosscut, 75 feet level, engine shaft, No. 4 tunnel. Stopping on the rich ore has been carried on as usual, and rich ore broken as usual. The faces show an average width of 18 inches of rich ore.—No. 1 winze, No. 2 crosscut, engine shaft, No. 4 tunnel. A start has been made to sink a winze in the footwall country alongside the rich ore vein. This winze has been sunk 3 feet; stripping the rich ore for that depth. The country is conglomerate; no ore has been broken yet. The inflow of water is somewhat troublesome.—North drive, 100 feet level engine shaft, No. 4 tunnel. The north drive has been advanced 3 feet, total 64 feet. It is still in the same hard country, but to-day the ground appeared to be slightly easier.—No. 5 tunnel. The contractors have driven 6 feet for the week, total 905 feet. The country has come in much stiffer again, hence the slower progress.—Ore raised. 160 bags of ore weighing 10 tons, and containing 10,020 ounces silver, and 2 tons 16 cwt. of copper have been raised, bagged, and sampled for the week.

MOUNT ZEEHAN (Tas.).—Manager reports for week ended November 27: Argent section. Main engine shaft, No. 6 lode, 72 feet level south, extended 7 feet 6 inches, total 286 feet 6 inches. Lode 1 foot 6 inches wide, and poor.—No. 4 lode, 72 feet level south. Winze sunk 6 feet. Lode 9 inches wide, carrying very good ore. Mill being engaged crushing for Zeehan Montana Company. No ore has been raised.—Silver Queen section. Good progress has, so far, been made in sinking new shaft, but water is now increasing. Sunk 19 feet 9 inches, total 34 feet.—Tributes. On Balstrup section tributaries are placing an engine to continue sinking of winze in tunnel. On Argent section, No. 1 tributary are making good progress with their shaft, and No. 2 tributary start driving to-morrow to cut lode at 50 feet level. Concentrator has been running on Zeehan Montana Company's ore.

MYSORE-WYNAAD AND MYSORE WEST (Tank Block).—The mining engineer (Mr. P. Bosworth-Smith) reports by mail for the half-month ended 15th December: South shaft. This has been sunk from 454 feet 9 inches to 461 feet 9 inches, a distance of 7 feet for the fortnight. We shall sink a good wall before crosscutting.—354 north. There is 1 foot of solid quartz in the end, which is worth 7 dwts. per ton. The general appearance of the end is very encouraging.—400 north. There is 18 inches of solid quartz in the end, worth about 15 dwts. There are other strings coming in, and the end is soft, and looks much better than it has for some time.—400 south was carried up to the boundary, where it showed 2 feet of quartz with 1½ ounce. We have carried a crosscut to the east at the end, in order to find out if there were any bunches; but after cutting 12 feet 6 inches we got into hard settled country, and consequently stopped. The level is now full of quartz and dead, so that we cannot start to rise in the back until the skiproad gets down here and we clear the level. The surface work is going on well; the stack is up 40 feet, and the piers for tramway have been raised 6 feet so as to give additional height in mill.

No. 7 NORTH-EAST QUEEN.—The following fortnightly report has been received from the mine, dated Charters Towers, November 23: Since my last report Gonion and party have crushed 34 tons for 29 ounces 9 dwts. 18 grains of gold. This party have given up the block. Perry and party have also crushed 32½ tons for

92 ounces 10 dwts. 15 grains of gold. This party are at present working a leader on the hanging wall from 6 to 12 inches in thickness, of good mineral stone. I have lifted up the roads at the No. 7 levels, and started driving the crosscut in the hanging wall of the No. 7 western level, where the water was struck some time ago. The country in the lower part of the crosscut is diorite with a granite back. At present the water is coming from a floor in the bottom of the crosscut, but we will know more about it in another week. The profits obtained by the company from above crushing were £736s. 5d. (Signed) H. Davis.

OOREGUM.—Fortnightly report of superintendent, dated December 19: Taylor's shaft, 660 feet level. Good progress is being made in excavating flats, and expect they will be completed by the end of this week, when sinking will be at once resumed. The 560 feet level south driven 19 feet, total 238 feet. Lode 3 feet wide, assay value 2 ounces 9 dwts. No. 1 winze 560 feet level south sunk 8 feet 9 inches, total 48 feet. Lode 3 feet, value 2 ounces 6 grains. No. 2 winze 460 feet level south sunk 3 feet, total 96 feet. Lode 3 feet, value 2 ounces 1 dwt. 9 grains; communicated with 560 feet level. The level north from back of No. 4 rise 230 feet level south driven 5 feet 3 inches, total 31 feet. Lode 6 inches, value 1 ounce 17 grains. Wallroth's shaft sunk 10 feet 3 inches, total 956 feet 9 inches. Lode 2 feet wide, assay value 5 dwts. 10 grains. This shaft will be the required depth for 960 feet levels by end of week, when the levels north and south will be commenced. The 860 feet level south driven 22 feet 3 inches, total 192 feet 3 inches. Lode 1 foot 9 inches, value 15 dwts. 6 grains. No. 1 winze 860 feet level south sunk 7 feet 9 inches, total 37 feet 3 inches. Lode 1 foot 6 inches, value 9 dwts. 19 grains. The 860 feet level north driven 7 feet, total 127 feet 6 inches. Lode 6 inches, value 4 dwts. 8 grains. No. 1 winze 860 feet level north commenced, sunk 6 feet 9 inches. Lode 10 inches, value 5 dwts. 10 grains. The 760 feet level south driven 17 feet, total 332 feet 6 inches. Lode 1 foot, value 2 ounces 1 dwt. 9 grains. From this 760 feet level south we are crosscutting both east and west at a point 300 feet from shaft to prove whether any more lode is standing in either direction, which will be reported on at end of month. No. 1 winze 760 feet level south sunk 4 feet, total 75 feet 9 inches. Lode 2 feet 6 inches, value 7 dwts. 15 grains. The 760 feet level north driven 8 feet 3 inches, total 192 feet 9 inches. Lode 4 inches, value 5 dwts. 10 grains. No. 1 winze, 760 feet level north, sunk 6 feet total 72 feet 3 inches. Lode 1 foot, value 6 dwts. 12 grains. The 660 feet level south driven 22 feet 3 inches, total 822 feet 3 inches. Lode 3 feet, value 1 ounce 12 dwts. 16 grains. No. 3 winze, 660 feet level south, sunk 4 feet 3 inches, total 85 feet 6 inches. Lode 6 inches, value 10 dwts. 21 grains. No. 4 winze, 660 feet level south, sunk 1 foot 3 inches, total 49 feet 3 inches. Lode very small. No sample. No. 5 winze, 660 feet level south, sunk 6 feet 9 inches, total 38 feet 3 inches. Lode 4 feet, value 12 dwts. No. 7 winze, 580 feet level south sunk 5 feet 9 inches, total 60 feet 3 inches. Lode 2 feet, value 16 dwts. 8 grains. The 360 feet level north driven 14 feet 9 inches, total 358 feet 6 inches. Lode 6 inches, value 4 dwts. 8 grains. The 280 feet level south from crosscut west driven 9 feet 9 inches, total 60 feet 9 inches. Lode 2 feet, value 6 dwts. 12 grains. In the extreme end the lode is very much disordered, consequently thought it advisable to crosscut east, to intersect the branch of quartz which the crosscut west passed through, and was described in report of 26th September. The 280 feet level north driving north on fold driven 7 feet 9 inches, total 70 feet 6 inches. Lode 10 inches, value 10 dwts. 21 grains. No. 4 winze 280 feet level north commenced sunk 7 feet 9 inches. Lode 9 inches, value 8 dwts. 17 grains. No. 4 winze 215 feet level north sunk 4 feet 6 inches, total 65 feet. Lode 1 foot, value 1 ounce 17 grains. No. 4 rise 215 feet level north risen 4 feet, total 30 feet 6 inches. Lode 1 foot, value 14 dwts. 4 grains. Low's shaft sunk 8 feet 6 inches, total 652 feet 10 inches. The 610 feet level south driven 8 feet, total 107 feet. No lode. The 510 feet level south driven 15 feet, total 316 feet 9 inches. Lode 2 feet 6 inches wide, assay value 9 dwts. 19 grains. No. 1 winze 510 feet level south sunk 9 feet 6 inches, total 50 feet 6 inches. Lode 3 feet, value 6 dwts. 12 grains.—Probyn's shaft. Crosscut east from 1050 feet level north driven 11 feet 6 inches, total 27 feet 6 inches. The 950 feet level south driven 10 feet, total 296 feet. Lode 3 inches, assay value 4 dwts. 8 grains. No. 1 winze 950 feet level south sunk 4 feet 9 inches, total 35 feet 9 inches. Lode 4 inches, value 8 dwts. 17 grains. No. 1 winze 950 feet level north sunk 3 feet 9 inches, total 82 feet 3 inches. Lode 6 inches, value 5 dwts. 10 grains.—No. 2 trial shaft. The 250 feet level south driven 11 feet, total 110 feet. Lode 2 feet wide, assay value 10 dwts. 21 grains. The 250 feet level north driven 10 feet 3 inches, total 119 feet. Lode 4 feet, value 15 dwts. 6 grains. Throughout the mine 52 stopes are being worked, which are yielding quartz of the average quality, which will be measured and reported on at the end of the month.

BARRETT GOLD.—Written advice to December 14 report all going well at mine and mill. Rautenback reef looking better than for months past. The opening up of other known reefs and deposits now being proceeded with. November gold, 581 ounces, has been received, and realised, in London, £2042; 1150 tons are treated by cyanide yielded £512 15s. A cablegram, dated January 5, says:—"December gold yield, 600 ounces."

JUMPERS (The).—Summary of operations for the month of November:—Driven and sunk during month, 640½ feet. The expenditure on plant is for the Gates crushers and new rock breaker station and cyanide plant, which are being erected. An extension of the contract with the African Gold Recovery Company (Limited) has been arranged, and this company will receive payment for at least 10,000 tons per month for the ensuing 12 months.



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Size 0—2 to 4 tons per hour.	Size 3—10 to 20 tons per hour.	Size 6—30 to 60 tons per hour.
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In the Matter of the Companies' Acts' 1862 to 1890, and of the

**Phoenix and West Phoenix United Mines.**

**TO BE SOLD BY TENDER**, in one or more lots, as a "Going Concern" or "Going Concerns," all these extensive, valuable, and productive mineral properties, known as the

**PHOENIX AND WEST PHOENIX UNITED MINES,**

in the parish of Linkinhorne, near Liskeard, Cornwall, together with the Company's interests in the Mining Leases or Setts under which its operations are being carried on, and including the Mining Plant, Machinery, Materials, Halvans, and effects thereon, comprising:—  
One 60 inch Pumping Engine with four Boilers.  
One 36 inch Pumping Engine and Boilers.  
One Double Cylinder Stamping Engine and three Boilers, capable of driving 96 heads of stamps.  
One 32 inch Stamping Engine, three Boilers, and 64 Heads of Stamps.

Two 28 inch Winding Engines and two Boilers.  
One 22 inch Winding Engine and Boiler.  
One Air Compressor Engine and Receiver for Boring Machinery and 500 fathoms Air Pipes.

One 15 inch Engine and Boiler.  
One 19 inch Engine and Cage Shaft, Crusher.  
One 20 inch Pulveriser Engine, Boiler, and three Pulverisers.  
Parts of a new Winding Engine for the new shaft.

One 60 feet Water Wheel for pumping water, with 300 fathoms of 24 inch rods and 40 fathoms of 15 inch Pumps.

212 fathoms of 12 inch Pumps, Poles, Rods, and 43 fathoms of 6 inch Pumps, with Plungers, &c.

250 fathoms of Flat Rods and all the necessary plant, machinery, and appliances for treating about 900 tons of tin stuff per week.

The appointments of Offices, Blacksmiths', Carpenters', and other shops.

**Also at Withybrook Mine.**

One 70 inch Pumping Engine, one 24 inch Winding Engine, Capstan and Engine, and other Machinery, and 70 fathoms of 14 inch Pitwork with Rods, &c.

The Mines contain one of the largest lodes known in the County of Cornwall, and have produced Copper and Tin Ores amounting to over £1,300,000 in value, and been only partially worked to a perpendicular depth of about 160 fathoms from surface.

The Geological Position of these Mines at the junction of the Granite and Killas is the best possible for the production of Minerals.

The Leases under which the properties are being worked can be inspected on previous application in writing to the undersigned Liquidators, and the purchaser or purchasers shall be deemed to have notice thereof, and to be bound thereby.

By special arrangement part of the consideration for the Sale might be in shares.

The Mines are situated about seven miles from Liskeard, and are connected with the Port of Looe by the Liskeard and Caradon Railway.

All Tenders to be sent not later than Tuesday, the 22nd day of January next, addressed to the undersigned Liquidators at the Office, Windsor View, Barn Street, Liskeard, Cornwall.

Any Tender not necessarily accepted.  
Applications to inspect the properties may be sent to the Liquidators at the above-named office.

WM. POLKINGHORNE,  
R. H. WILLIAMS,  
CHAS. WM. CLINTON, } Liquidators.

Dated this 22nd day of December, 1894.

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Intending purchasers can communicate with the proprietor of the estate and colliery,

COUNT ARTHUR PEJACEVICH,  
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RATCLIFFE and SONS, Hawarden Iron Works, Chester.

**COMPANIES AND LEGAL  
ANNOUNCEMENTS.**

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**"CALLAO BIS" (LIMITED).**

**THE CREDITORS** of the above-named Company are required on or before the 1st day of March, 1895, to send their names and addresses, and the particulars of their debts or claims, and the names and addresses of their Solicitors (if any) to James Henry Thornton, of Winchester House, Old Broad Street, in the City of London, the Liquidator of the said Company, and, if so required by notice in writing from the said Liquidator, are, by their solicitors, to come in and prove their said debts or claims at such a time and place as shall be specified in such notice, or, in default thereof they will be excluded from the benefit of any distribution made before such debts are proved.

Dated this 1st day of January, 1895.

ENELL, SONS, and GREENIP, 1 and 2, George Street,  
Mansion House, E.C., Solicitors for the Liquidator.

**JOHANNESBURG CONSOLIDATED INVESTMENT  
COMPANY (LIMITED).**

**NOTICE OF REMOVAL.**

**THE** above Company have this day REMOVED to their NEW OFFICES, No. 7, Lothbury, London, E.C., and give notice that they have been appointed London Agents to the following Johannesburg gold mining companies:—

New Primrose Gold Mining Company (Limited).  
Glencairn Main Reef Gold Mining Company (Limited).  
Langlaagte Royal Gold Mining Company (Limited).  
New Spes Bona Gold Mining Company (Limited).  
New United Main Reef Gold Mining Company.  
Roodepoort Gold Mining Company (Limited).

All transfer and other business in connection with the said agencies will be conducted at above address.

By Order, THOS. HONEY.

No. 7, Lothbury, London, E.C., 10th January, 1895.

**WANTED.**

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Athenian	—	—	—	Feb. 2
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FRANCIS RAVENSCROFT, Manager.



## MINING NOTES FROM JOHANNESBURG.

By H. BUSH, M.E.

(Cabled Weekly).

## Crown Deep.

From development work now being carried out, this mine gives promise of being one of the best Deep Level properties on the Rand. The assays are unusually rich for such large bodies of ore.

## Wolhuter.

With the extra stamps at work, this company should pay dividends at the rate of 50 per cent. per annum. The mine is well developed, having vast reserves of ore in sight.

## Randfontein.

Excellent returns are being obtained from the leader, which is found to extend through the whole of the estate. There is now not the least doubt but that there is a great future before this company.

## East Leigh

has 900 claims, and will have 60 extra stamps next month. The mine is patchy, but may be expected to average 10 dwts.

## Bantjes.

Work is about to be commenced, and a return of about 10 dwts. will probably be the result. The assets represent about £30,000, which will be ample to thoroughly test this mine.

## Bonanza Mine.

Active development is being carried on, and in about three months' time the south reef should be struck, which, at this point is likely to be very rich. Twenty stamps will be erected, but the mine has only a life of about six years, unless the Main reef can be profitably worked, which, as yet, is not proved.

## Gipsy and Gordon Estates.

It is rumoured that there will be an amalgamation of these properties, but as the ore is very low grade, and the reefs much broken, it would be advisable to await further developments before investing.

## Cassell's Colliery.

This mine is opening up fully 20 per cent. better than was expected, and the mining managers of the Rand are unanimous in their opinion that it is the best steam coal produced in South Africa. The adjoining properties—the Rand Collieries (Eastern Cassell's)—has been proved to contain coal of an equally good quality, and the future of this district as a great coal field is assured.

## City and Suburban.

An extra 40 stamps will be working about June, and, as the mine has the largest amount of ore developed of any mine on the Rand (over 300,000 tons), there will be no difficulty in keeping these extra stamps going. The reefs in this mine average over 10 feet of ore. The heavy debt has been paid off, and dividends should be declared early in 1895.

## May Consolidated.

There will be extra profits during the New Year, owing to the old stock of tailings that will be treated. The mine has a life of about 14 years, with 80 stamps working, and the profits will amount to over £65,000 per annum. Pannings from the lowest levels show an improvement of fully 1 dwt. per ton.

## Glencairn.

There are over 2,000,000 tons of ore in this property, which should keep 70 stamps going for about 18 years. The mine is opening up very rich, and the profit per ton will increase fully ½ dwt.

## Crown Reef.

Matters do not look very promising for the future here, and great difficulty is experienced in keeping the 120 stamps going. The 60 stamps now shut down are likely to have a long time of rest, and it is not improbable that within three months a few of the 120 now working will keep company with the 60 now idle. The reefs are small, and development is sadly behind.

## Village Main.

This mine will close down after the end of this month, and will not restart again for two months. The cleaning up of the mine previous to shutting down is the reason of the increased yield. The new shaft will not likely cut the reef before 10 or 12 months, after which time there is a great future before this company—when the ore bodies are thoroughly opened up.

## New Kleinfontein and Benoni Syndicate.

It is not improbable that an amalgamation will shortly be arranged between these two companies on a basis favourable to both. The acquisition will be decidedly an advantage to the outcrop company, and will mean making these combined properties one of the leading mines on the field. The Kleinfontein shareholders are anxious that an arrangement should be completed at an early stage, and the owners of the Benoni show an inclination for meeting the proposal on terms that will meet with approval from all concerned.

## George Goch.

Although the management have had to encounter many difficulties in the way of breakdowns, &c., the reefs continue to open up fairly well, but the large indebtedness is a considerable drawback.

## Cresus.

The new works should be completed some time during March, but when crushing commences there will be a large indebtedness, and the result will not be so favourable as many anticipated. There is no question that the management so far is all that can be expected, but, with the exception of the one rich chute dipping into the Block B, the rest of the reefs can be classed as poor.

**SPANISH MINES.**—The total number of mines registered in Spain is over 15,000, of which only about 2000 are worked. In 1893 out of a total production in Spain of 5,497,540 tons, the consular district of Bilbao was responsible for 4,918,650 tons; whilst in 1892, out of a total for Spain of 5,405,170 tons, the consular district of Bilbao furnished 4,573,560 tons.—*Revi ta Minera.*

**ALUMINIUM.**—It is said that Dr. Warth, of Madras, has discovered a mineral in the Palni Hills, near Madras, in the Madras Presidency, which is said to contain about 48 per cent. of aluminium oxide, and if the locality indicated were thoroughly exploited, it is said that considerable profit would ensue, and another mining industry be established.—*Indian Engineer.*

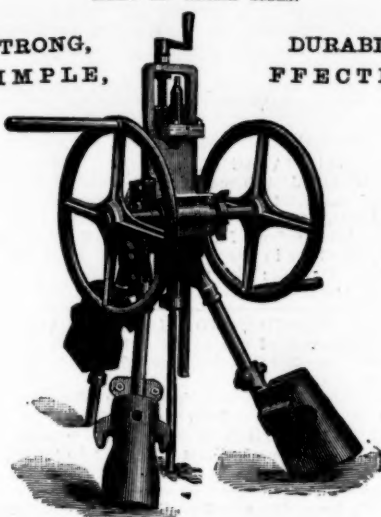
**NEW MAGNETIC ANTIMONY.**—A new antimony mineral has been found in the Sjö, which is described in the "Zeitschrift für Kristallographie und Mineralogie," xlii., p. 212, by L. J. Igelström. The mineral closely resembles magnetite and jacobite, but viewed in section under the microscope it is transparent and red. It occurs in the form of grains in limestone, and its composition is (MnO, Fe, O)<sub>2</sub>, Sb<sub>2</sub>O<sub>3</sub>. It is highly magnetic.

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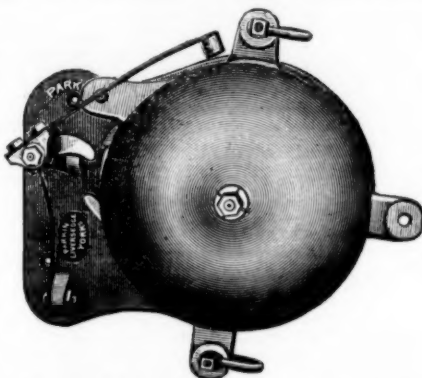
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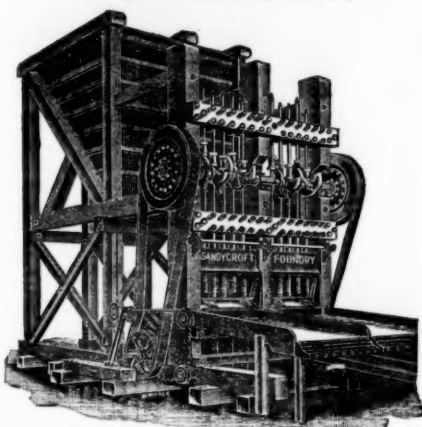
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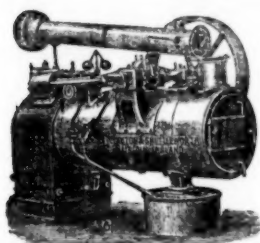
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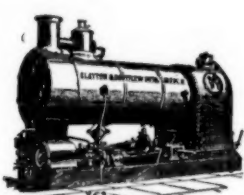
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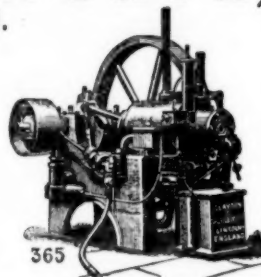
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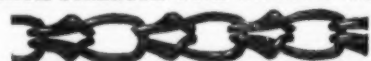
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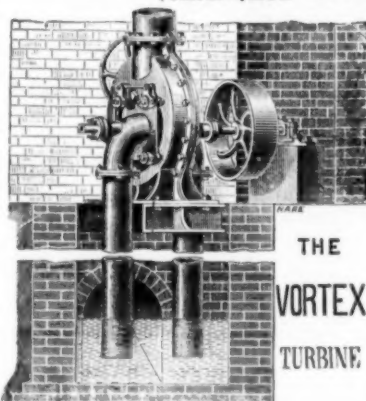


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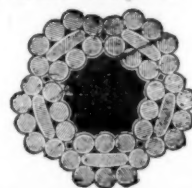
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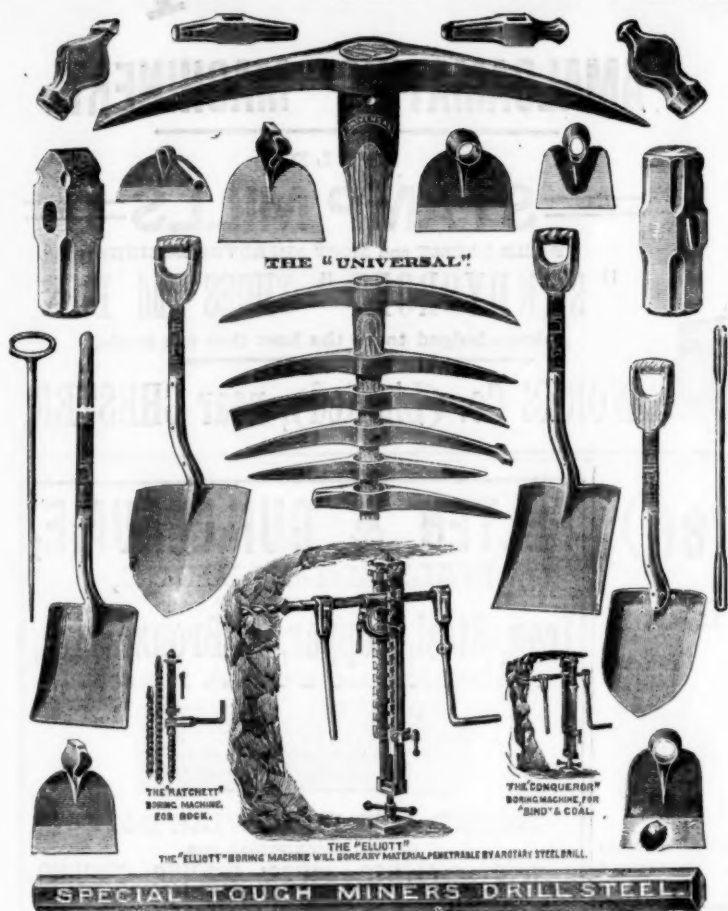
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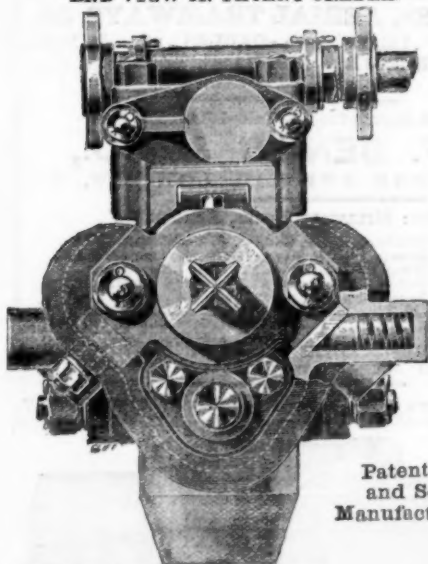
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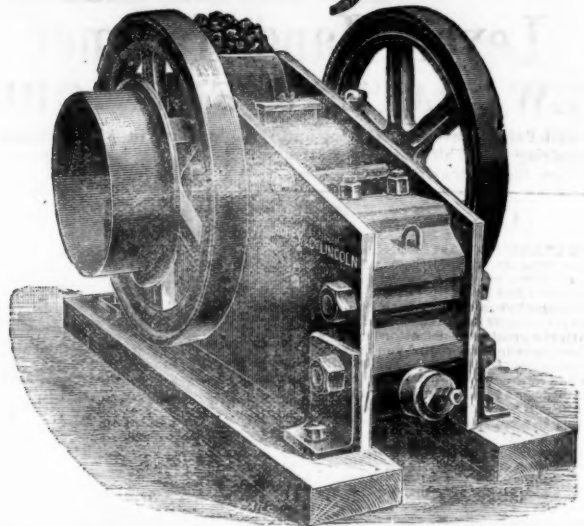
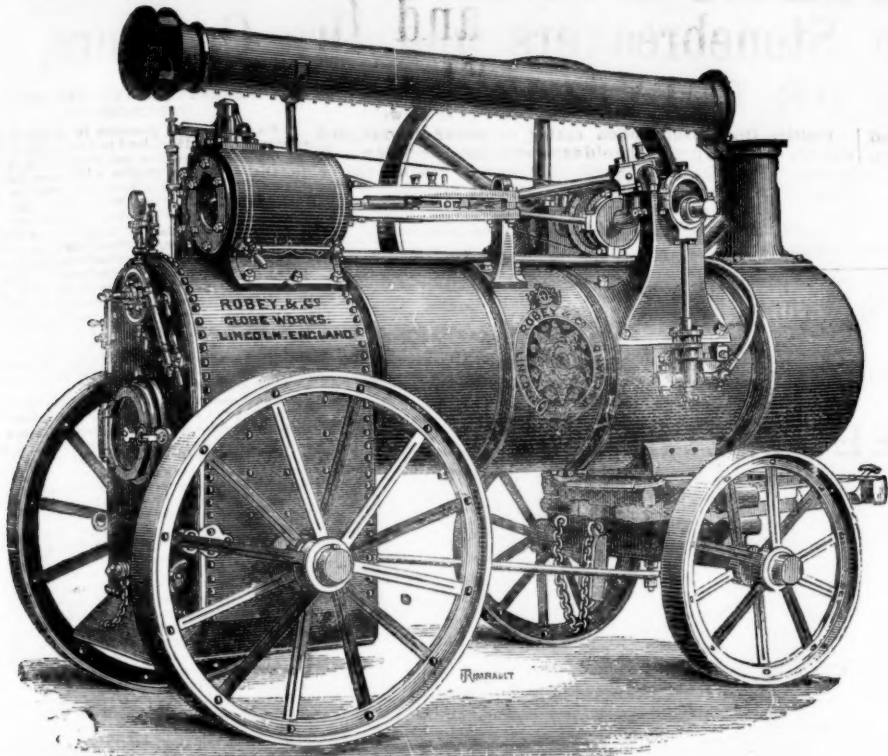
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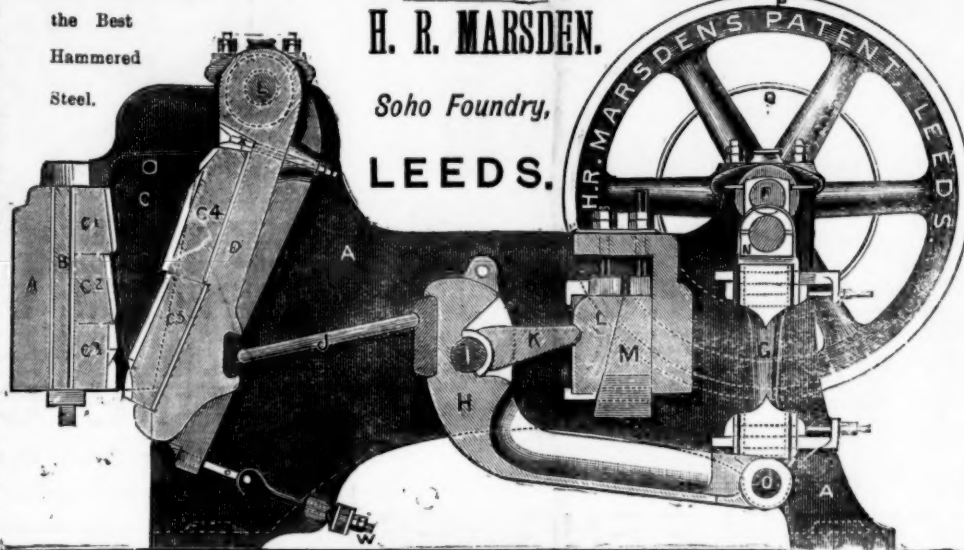
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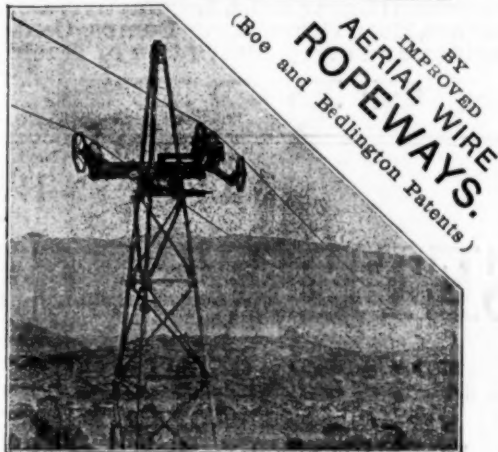
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